NetworX Version 3 Alarm System

Installation Manual

1070138

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Certification

ISO 9001 Certified CE

EN 50131-1 System requirements
EN 50131-3 Control and indicating equipment
EN 50131-6 Power Supplies
EN 50131-5-3 Requirements for interconnections equipment using radio frequency techniques
EN 50136-1-1 Alarm systems - Alarm Transmission systems
EN 50136-2-1 General requirements for alarm transmission equipment
PSTN transmission path: ATS Class 2 (D2, M2, T2, S0, I0) with notification options A, B, C
GPRS transmission path: ATS Class 5 (D3, M3, T4, S2, I3) with notification options A, B, C, D
Security Grade 2, Environmental class II

Tested and certified by Telefication B.V.

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Preface

This is the *NetworX Version 3 Installation Manual*. This document includes an overview of the product and detailed instructions explaining:

- how to install and configure the components of your NetworX V3 system; and
- how to program the system.

To use this document effectively, you should have the following minimum qualifications:

- a basic knowledge of alarm systems and components; and
- a basic knowledge of electrical wiring and low-voltage electrical connections.

Read these instructions and all ancillary documentation entirely before installing or operating this product.

Note: A qualified installer, complying with all applicable codes, should perform whatever hardware installation is required.

Read "Appendix 7: EN 50131 compliance" on page 269 if you are installing a system that needs to be EN 50131 compliant.

Safety terms and symbols

These terms may appear in this manual:

CAUTION: *Cautions* identify conditions or practices that may result in damage to the equipment or other property.

WARNING: *Warnings* identify conditions or practices that could result in equipment damage or serious personal injury.

References

For more information, refer to the following:

NetworX V3 Menu Structure

This menu structure provides a map of the NetworX V3 menu options, including those for all the additional modules.

NX Expander Installation Guide

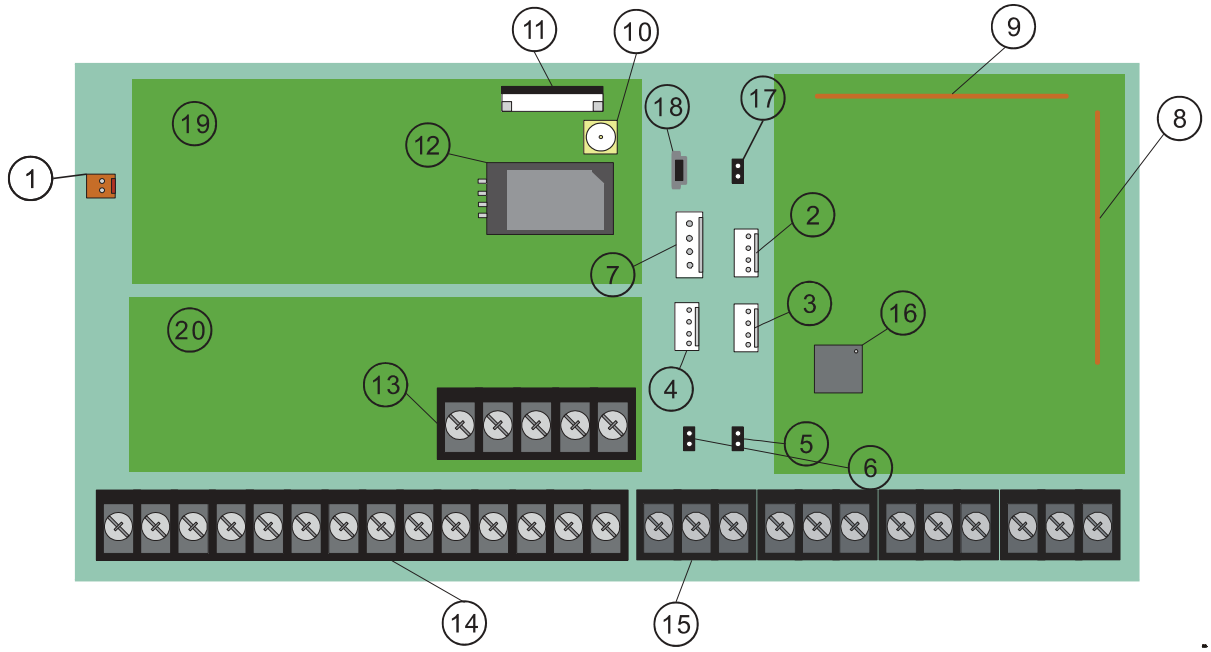
This manual contains detailed information about additional modules and their installation.

Section A Installing and programming a basic system

Chapter A1 Introducing the NetworX V3 system

NetworX V3 diagram

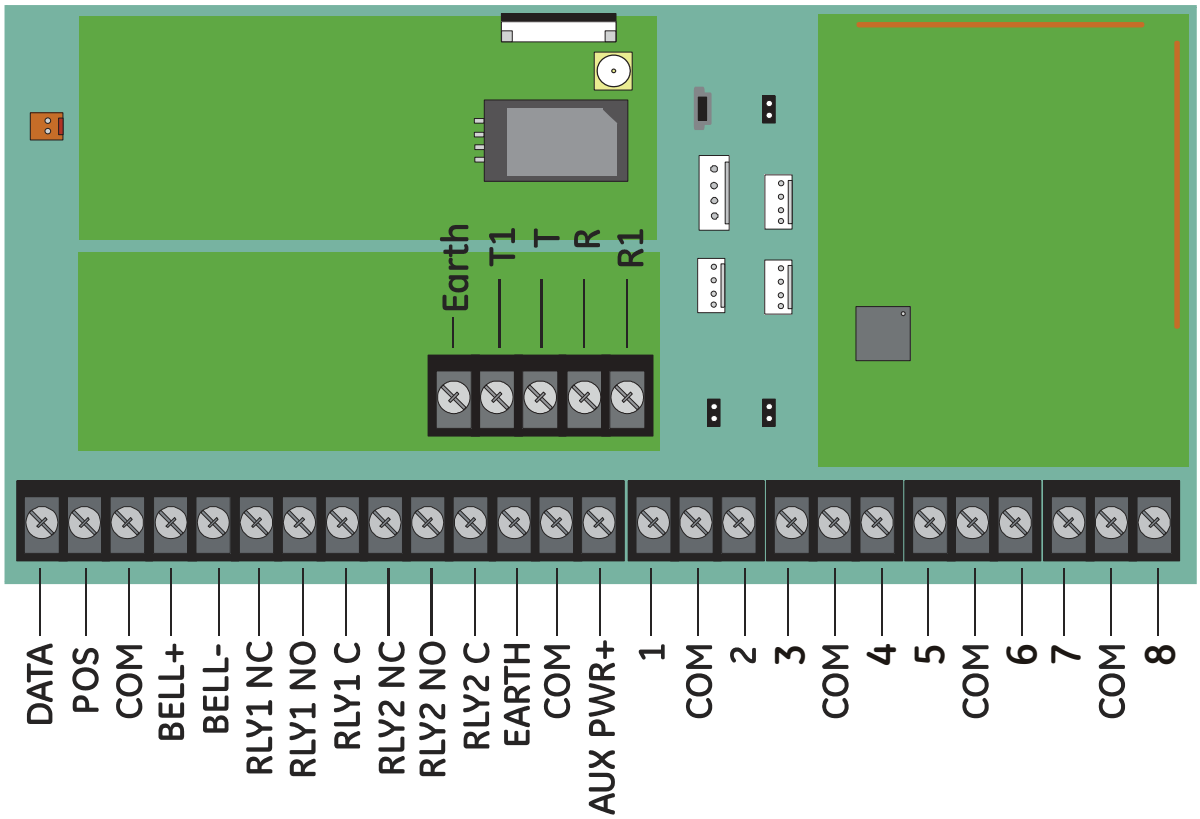
Figure 1. NetworX V3 board diagram



1	Transformer	11	VVMIQ Connector
2	NetworX Bus (internal)	12	SIM Card Holder
3	NetworX Bus (internal)	13	Telephone connections (see Figure 2)
4	NetworX Bus (internal)	14	Outputs (see Figure 2)
5	Box Tamper	15	Inputs (see Figure 2) [1]
6	Box Tamper	16	RF microprocessor
7	Audio Tap Outputs	17	Flash/DL900 jumper
8	Antenna	18	Mini USB connection
9	Antenna	19	GSM Modem (for status LEDs description, see page 194)
10	GSM Antenna Connector	20	PSTN Modem

[1] The number of onboard zones differs for particular panel models. Refer to “NetworX V3 technical specifications” on page 13.

Figure 2. NetworX V3 inputs and outputs



DATA	Connect to Data terminal of keypad and expanders
POS (+)	Connect to Positive (+) terminal of keypad and expanders
COM	Connect to negative (–) terminal of keypad and expanders
BELL+	Internal bell positive
BELL–	Internal bell negative
AUX PWR+	Power (+)
Relay 1 NC	Relay 1 (normally closed)
Relay 1 NO	Relay 1 (normally open)
Relay 1 C	Relay 1 (common)
Relay 2 NC	Relay 2 (normally closed)
Relay 2 NO	Relay 2 (normally open)
Relay 2 C	Relay 2 (common)

COM	Power (–)
AUX PWR+	Power (+)
AUX PWR+	Power (+)
1	Zone 1 [1]
COM	Common (–) for zone 1 and zone 2 [1]
2	Zone 2 [1]
3 to 8, COM	Zones 3 to 8 and common terminals [1]
Earth	Ground
T1	House Telephone Tip
T	Telephone Tip
R	Telephone Ring
R1	House Telephone Ring

[1] The number of onboard zones differs for particular panel models. Refer to “NetworX V3 technical specifications” on page 13.

NetworX V3 technical specifications

Table 1. Available NetworX V3 panel models

Panel models	Onboard zones capacity
NX-5	0
NX-7	6
NX-9, NX-11	8
NX-10	2

Table 2. NetworX V3 technical specifications

Mains power specifications	NX-xx(-GSM)-EUR	NX-xx(-GSM)-LB-EUR
Mains input voltage	230 VAC +10%, –15%, 50Hz ±10%, 25 VA	230 VAC +10%, –15%, 50Hz ±10%, 40 VA
Current consumption at 230 VAC	120 mA typical, 300mA max.	200 mA typical, 500mA max.
Main board supply voltage (AC: CON8)	16.5 VAC typical	
Power supply specifications	**NX-xx(-GSM)-EUR**	**NX-xx(-GSM)-LB-EUR**
Power supply type	Type A, EN 50131-6	
Power supply voltage [5]	Min. 9.5 V⎓ ± 2% Typ. 13.8 V⎓ ± 2% Max. 14.4⎓ ± 2%	
Power supply current	0.9 A max. at 13.8 V⎓ ± 2%	1.8 A max. at 13.8 V⎓ ± 2%
Main board consumption: Non-GSM variant GSM variant	145 mA ± 10% at 13.8 V⎓ ± 2% 180 mA ± 10% at 13.8 V⎓ ± 2%	
Maximum system current available [1] Non-GSM variant GSM variant	740 mA max. at 13.8 V⎓ ± 2% 700 mA max. at 13.8 V⎓ ± 2%	1640 mA max. at 13.8 V⎓ ± 2% 1600 mA max. at 13.8 V⎓ ± 2%
Auxiliary power output (AUX PWR+, POS) [2]	See Table 2	See Table 3
Battery type	Lead acid rechargeable, 7.2 Ah 12 V nom. (BS127N)	Lead acid rechargeable, 7.2 Ah 12 V nom. (BS127N) or 12 Ah 12 V nom. (BS130N)
Maximum voltage at power supply, auxiliary power output and battery power output	14.4 V⎓	
Battery low condition	11.6 V⎓	
Deep discharge protection [7]	9.7 V⎓	
Maximum ripple voltage Vpp [3]	300 mV typical, 600 mV max.	

Standard onboard outputs	NX-xx(-GSM)-EUR	NX-xx(-GSM)-LB-EUR
Built-in Siren Driver (BELL+, BELL-)	Electronic output, rating: 1 A at 13.8 V⎓ ± 10%	
High current outputs (RLY1 and RLY2)	Relay, rating: 1 A at 13.8 V⎓ ± 10%	
Control panel fuses	**NX-xx(-GSM)-EUR**	**NX-xx(-GSM)-LB-EUR**
Battery	5 A, resettable	
AUX PWR+	1 A, resettable	
POS	1 A, resettable	
Mains, mains fuse [4]	315 mA, T 250V 20x5	630 mA, T 250V 20x5
Environmental	**NX-xx(-GSM)-EUR**	**NX-xx(-GSM)-LB-EUR**
Operating temperature	–10 to +55°C	
Humidity	Max 95% non condensing	
IP protection grade	IP30	
Colour	Beige	
Dimensions	220 x 253 x 112 mm	394 x 256 x 118 mm
Shipping weight	1.8 kg	2.8 kg
EN 50131 grade and class	Securuty Grade 2, Environmental Class II	
General features	**NX-xx(-GSM)-EUR**	**NX-xx(-GSM)-LB-EUR**
Code combinations [6]	From 10,000 (4 digits) to 1 million (6 digits)	
End-of-line resistor	3.3 kΩ	
Data retention (log, program settings)	20 years	

[1] Current available for AUX PWR+, POS and battery charge outputs (non-EN-mode).

[2] Maximum permanent current to power devices external to the control equipment in the absence of alarm conditions (EN-mode).

[3] Max ripple voltage only when empty battery is charging.

[4] Mains fuse is a part of the mains terminal block.

[5] Minimum voltage only when mains supply voltage is disconnected and system is running on battery.

[6] There are no disallowed codes.

[7] Optional function for the EN 50131 compliance.

WARNING: Before removing the mains fuse, mains power must be disconnected.

Auxiliary current and battery capacity

Table 3. NX-xx(-GSM)-EUR maximal available auxiliary current

Battery		7.2 Ah		
Discharge Time (h)	Charge Time (h)	Auxiliary current (mA)		
12	72	350		EN 1&2

Table 4. NX-xx(-GSM)-LB-EUR maximal available auxiliary current

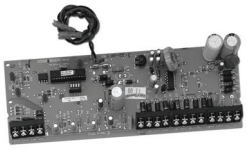
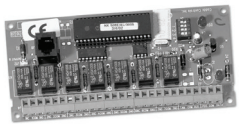
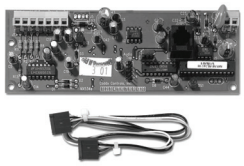
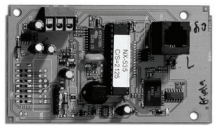
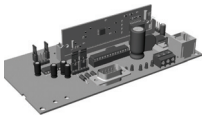
Battery		7.2 Ah	12 Ah	
Discharge Time (h)	Charge Time (h)	Auxiliary current (mA)		
12	72	350	700	EN 1&2

NetworX V3 system

NetworX V3	
Number of wireless zones	48
Number of onboard hardwired zones	See Table 1.
Maximum number of hardwired zones	42
Maximum number of zones	48 zones (if 2 hardwired zones are used, than there are 46 wireless zones left to use)
Number of partitions	4
Maximum number of wireless outputs	8 (including sirens)
Outputs on board	2 NC/NO relays, 1 internal siren
Maximum number of input expanders	5
Maximum number of output expanders	8
Maximum number of RF output modules	4 (including sirens)
Report formats	Contact ID, Ademco 4/2 Express, Siren Tone, Vocal, Radionics extended fast with parity, Ademco/Silent Knight Slow, Silent Knight 4+2 fast, Sescoa/Franklin Fast, SIA, XSIA and custom formats
Maximum number of wireless keypads	4
Support for Proximity Reader	Yes
RF Dual Transceiver	Internal, built-in
GPRS module	Internal, built-in (in NX-xx-GSM-EUR and NX-xx-GSM-LB-EUR panels only)

Parts of the system

Table 5. System modules

	Part number	Description	Purpose
	NX-1048-R-W NX-1048-W	Wireless Menu LCD Keypad Menu LCD Keypad (wired)	Used for programming and using the system. Wireless and wired keypads can be used.
	NX-1701E	Door swipe module	Proximity card reader/door control module. You can program it to control access in any or all partitions.
	NX-320-I	Auxiliary power module	Provides additional power for modules attached to a panel.
	NX-507E/NX-508E	Output expander module	Expands the number of outputs available on the system.
	NX-534E	Audio (listen-in) module	Two-way audio (listen-in) communicator that allows the situation on the premises to be monitored.
	NX-535	Voice module	Allows events to be reported using voice messages.
	NX-586E	Direct connect module	Used as: 1. A direct connect interface between the panel and PC. 2. A storage device, when connected only to the PC. You can also read/write from 1 of the 4 locations via the DL900 downloader. 3. A storage device, connected only to the panel. You can read/write from 1 of the 4 locations on the NetworX V3.
	NX-590E	TCP/IP Module	Dual microprocessor-controlled Internet/Intranet interface.

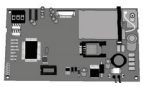
	Part number	Description	Purpose
	NX-7002	GPRS module	Allows events to be reported via a GSM network or a GPRS network. The GPRS module is a part of the main panel board, so it does not require a separate installation procedure. It is available on the NX-xx-GSM-EUR and NX-xx-GSM-LB-EUR panels only (not on the NX-xx-EUR and NX-xx-LB-EUR panels.)

Table 6. Wireless equipment

	Part Number	Part Description	Purpose
	TX-7001-05-1	INDOOR SIREN, 868 MHz GEN2	This full wireless indoor siren offers you wireless communication and wireless operation by batteries with a typical tone sound output of 108 dB.
	TX-7201-05-1	OUTDOOR SIREN, 868 MHz GEN2	This full wireless outdoor siren offers you wireless communication and wireless operation by batteries with a typical tone sound output of 125 dB and an internal flashlight.
	BS7201	Spare battery pack for the TX-7201-05-1 siren.	The 14 Ah lithium battery pack for the outdoor wireless siren.
	TX-6211-03-1	SMOKE DETECTOR, 868 MHz GEN2	The smoke sensor is a wireless, battery operated photo-electric smoke sensor. It incorporates a built-in sounder for alarm alerts, a visual status LED and a transmitter.
	TX-1211-03-1 TX-1211-03-3	LONGLIFE DWS, 868 MHz GEN2	This wireless universal transmitter protects anything that opens and closes such as doors, windows and cabinets. Moreover, there is an extra terminal that allows to connect an additional wired detector. The Long-Life version distinguishes itself by allowing two batteries to be used and reduce the need for maintenance.

	TX-4131-03-2	4 BUTTON KEYFOB, 868 MHz GEN2	The 4-button keyfob is a portable wireless device allowing you to arm or disarm the system without having to memorise access codes or race to beat entry or exit delays. It offers two additional programmable buttons, which can be used to turn lights on and off before entering the premises, or any other function defined in the system. It can also be programmed to send a panic alarm by pressing the Lock and Unlock buttons simultaneously, or to send a medical alarm by pressing the Light and Star buttons simultaneously.
	TX-2211-03-1	Mirror PIR, 868 MHz GEN2	This motion detector uses mirror technology to cover up to 16 metres. It has a rich feature set including standard '4D' or bi-curtain processing providing improved detection and false alarm immunity.
	TX-2411-03-1	DUAL MOTION SENSOR PIR/MW, 868 MHz GEN2	This dual motion detector combines mirror technology and microwave to provide you with excellent false alarm immunity on a range of up to 12 metres. It also features GE's patented Range Controlled Radar technology.
	TX-1011-03-1 TX-1011-03-3	SLIMLINE DWS, 868 MHz GEN2	This wireless universal transmitter protects anything that opens and closes such as doors, windows and cabinets. Moreover, there is an extra terminal that allows to connect an additional wired detector.
	TX-8001-05-1	IO-MODULE, 868 MHz GEN2	The IO-module allows you to link a wired application to your wireless security system using two open collector outputs and a supervised external power input.

Keypads

Wireless keypad

The wireless LCD keypad allows you to program the NetworX V3 system using a menu structure. There is also an option to use the wired keypad with the same functionality.

Figure 3. Keypad.

The LCD features the white backlight to allow keypad operation in the dark. Illumination level is as low as possible to save energy. LCD backlight turns ON gradually when the user hits the first key, and turns OFF gradually 30 seconds after the last key operation. The status light (logo) in the top left corner indicates the current partition status.

In the single-partition mode:

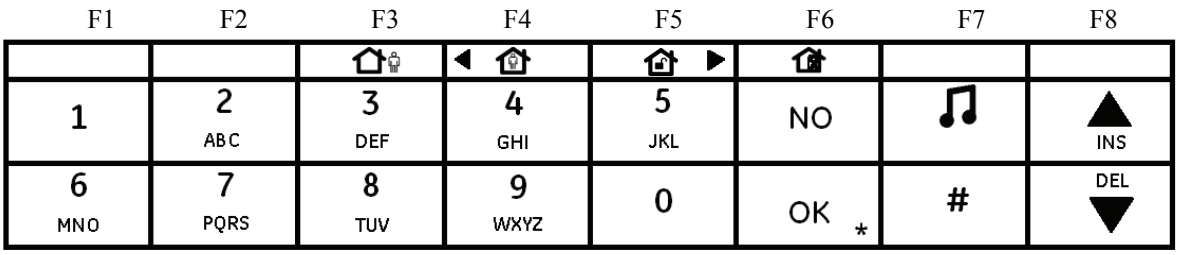
- logo is red when the partition is armed in any mode,
- logo is green when the partition is disarmed.

In the master (multi-partition) mode:

- logo is red when any partition is armed in any mode,
- logo is green when all the partitions are disarmed.

The NetworX V3 keypad has the following key layout out-of-the-box:

Figure 4. Default keypad layout.



The four top-row keys with the blank keycaps can be replaced by the installer, as they are supplied with the keypad for this purpose. *Figure 3* shows the keypad with the optional function keycaps placed in their default positions (factory setting). Optional keycaps available for assigning to the four programmable keys are:

Keycap symbol	Name	Default factory setting
	PANIC	F1
	FIRE	F2
	MEDICAL	F8
	NIGHT MODE	F7
	CANCEL	Not assigned

Note: The function keycaps can be placed randomly over the four available positions. Actual function activation is accomplished through a menu option during installation.

For more information about programming function keys F1 to F8, see *Programming the function keys* on page 154.

Table 7. Key functions

Arm Away	Press to arm the system. **Note:** Exact behavior of this key depends on the system settings configured by the installer. For more information, see the *Master Keypad*, and the *Quick Arm* menu option descriptions in the glossary.
Arm Stay	Press to arm the system in Stay mode. **Note:** For this mode to work correctly, interior zones must be set. You can also configure this key to toggle the Stay/Instant mode of the armed partition. For more information on this button behavior, see the *Master Keypad*, *Instant Stay Toggle*, and the *Quick Arm* menu option description in the glossary.

		When in the menu: Press to scroll to the start of the LCD message.
	Disarm	When in master mode: Press to disarm the system. **Note:** The Disarm key works in the master mode only, after the user code and the partition number have been entered. When in the menu: Press to scroll to the end of the LCD message.
	Bypass	Press to select a zone to bypass. The *Enter Zone No.* prompt displays. Type the zone number and press OK. Repeat this action for subsequent zones you want to bypass. To remove a zone from the bypassed zone set, enter its number again. To partially arm the system with the selected zones bypassed, enter the user code. Disarming the system clears the bypassed zone set.
	Night Mode	Press to arm the system in Night mode. **Note:** For this mode to work correctly, entry guard zones must be set. Also, see notes below.
	Chime	Press to toggle the Chime mode on and off. A chime is often used as an indication on a shop door. There is a beep on chime activation and no beep on deactivation. For more information, see the *Chime* menu option description.
NO	**No**	Press **No** to: •Cancel a change to the menu selection **or** •Navigate to a higher level in the menu structure **or** •Cancel a sequence when entering numeric data. **Note:** Press NO key to clear any incorrectly entered user code or other information.
OK*	**OK**	Press **OK** to: •Activate the menu **or** •Accept selection changes **or** •Move forward in the menu structure **or** •Complete a sequence when entering numeric data.
#	**Hash**	When editing text and phone numbers: •Press **# F4** to move to the first character or digit. •Press **# F5** to move to the last character or digit. •Press **#↓** to delete a part of the string starting from the current cursor position to the last character or digit. •This button also allows to enter other special characters (see *Changing phone numbers and phone prefixes on page 42*).
 	Navigation keys	Press the navigation keys to scroll through menu lists and options. When in master mode or not in a menu: •Press ↑ to display bypassed zones. •Press ↓ to display problem zones. When editing text and telephone numbers: •Press ↑ to overwrite or insert text. •Press ↓ to delete text.

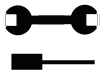
Notes: F1, F2, F7, and F8 function keys can be programmed by the installer. F7 function key is programmed to Night Mode by default. Function keys behave differently, depending on the settings configured by the installer, for example, see descriptions for the *Quick Arm*, *Instant Stay Toggle* and *Master Keypad* menu options.

LCD icons

The LCD display for the NetworX V3 keypad consists of two separate sections, one for displaying 2 rows of 16 characters of alphanumeric data, and one for showing icons. The display section on the wireless keypad showing alphanumeric data is only turned ON while the user is operating the keypad, and turns OFF 30 seconds after the last key hit. The icon section is always ON and shows all kinds of conditions as explained in *Table 8*. They can either be OFF or ON or they can be flashing to draw attention.

Table 8. LCD icons

Symbol	Name	Description
1	Power	If mains power is present, the left icon is displayed. If mains power is not present, the right icon shows up. Panel battery low is indicated by flashing the icon, either the left one or the right one.
2	Bypass	In MASTER mode, the left icon shows up if ANY zone in any partition is bypassed. In PARTITION mode, the right icon is being displayed if ANY zone is bypassed.
3	Full/Part armed	In MASTER mode, the FULL icon (left) shows up only if ALL partitions are ARMED, while the PART icon (right) shows up if NOT ALL partitions are ARMED.
4	Stay/Night	In PARTITION mode, the STAY icon (left) shows up if armed and staying, and the NIGHT icon (right) if the night function is enabled.
5	Away	In PARTITION mode, one of these icons shows up if armed and leaving, the left one if ANY zone is bypassed, the right one if NO zone is bypassed.
6	Chime	In CHIME mode, this icon will be ON. If the CHIME mode is disabled, it will be OFF.
7	Fire	This icon will be displayed when a fire zone has been activated (fire alarm), and it will flash in case of fire trouble.

8		Battery low	This icon is only available on the wireless keypad and flashing when the keypad battery is low.
9		Alarm	This icon flashes in case of an alarm condition.
10			This icon is only available on the wireless keypad and indicates RF-link field strength. The one most to the left indicates absence of RF, the one most to the right indicates full signal strength. It will flash as long as the keypad is not registered yet.
11		Trouble	This icon indicates a system trouble condition, for example, fire trouble, day zone trouble or AC power loss. You can display the trouble list by pressing the # (hash) button on the keypad (see *Appendix 4: Service messages* on page 264.)
12		Service	This icon is ON in case the system needs to be serviced. It can indicate many conditions, for example, ground fault, phone fault, fail to communicate, box tamper, loss of system time, and similar problems. You can display the service message list by pressing the # (hash) button on the keypad (see *Appendix 4: Service messages* on page 264.)
13		Ready to arm	If the system is OK to arm, the V-sign icon is displayed. If it is NOT OK to arm, the V-sign disappears. In case a force armable zone is open, it will show a flashing V-sign (see Table 15 *Default zone types*, and *Force Armable* menu option description in the glossary.)

Note: In case of power supply problems, the following icons are displayed:

Power	Normal mode	Screensaver mode
NO faults	ON	ON
AC fault Battery OK	ON ON	Blinking
AC OK Battery fault	Blinking ON	Blinking

AC fault **Battery low**	ON	ON	Blinking
AC OK **Battery low**	Blinking	ON	Blinking

Chapter A2 Installation guidelines

Mains power connection

Use the mains connector terminal for connecting the mains supply. You can use a fixed cable or a flexible mains lead to an earthed mains outlet. If fixed wiring is used, insert a dedicated circuit breaker in the power distribution network. In all cases, the mains connection must comply with local regulations.

WARNING: Disconnect the mains power before opening the cabinet.
To do this:

- Disconnect the AC mains plug from the AC mains wall socket.

or

- Disconnect the mains with the dedicated circuit breaker.

CAUTION: This unit can is provided with a lead battery inside. Batteries can explode or cause burns when incorrectly (dis)assembled, or exposed to fire or high temperatures. Dispose of used battery according to battery directive instructions and/or as required by local laws. Keep away from children.

To replace the battery, please disconnect it and remove it from the holder. If required, replace with the GE Security BS127N lead batery only. Do not use a different type of batteries.

Mounting

- Ensure that the unit is mounted on a flat, solid, vertical surface so that the base will not flex or warp when the mounting screws/bolts are tightened.
- Leave a 50 mm clearance between equipment enclosures mounted side by side and 25 mm between the enclosure and the cable pathway.
- The battery mounting facility inside the housing is only useful for steady state use of the control panel. Remove the battery for transport of the control panel.

Wiring guidelines

The NetworX V3 has been designed, assembled and tested to meet current standards for safety, emission and immunity from environmental electrical and electromagnetic interference. Only a qualified electrician or other suitably trained and qualified person should attempt to wire this system to the mains or to the public telephone network.

1. Ensure that there is a good earth for the alarm system for effective resistance to electrical interference. Provide an earth connection for the standalone telephone dialer.
2. For mains power connection, use the mains connector terminal either via permanent wiring or a doubly insulated flexible mains cable to an earthed mains outlet. Always use cable ties to fix the mains cable, at the dedicated fixing point provided near the mains terminal connector.

CAUTION: Never attempt to solder a mains connection wire's end where they will be wired to the terminal connectors.

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3. The battery used with the NetworX V3 must be made of materials of flammability class HB or better.
4. The mains switching relay must not be fitted inside the control panel cabinet.

The minimum clearance between equipment closures is 50 mm between equipment vents.

Only use units in a clean environment and not in humid air.

Defaulting the panel

Before installing and programming the system, default the panel to ensure that you have the correct country defaults according to your local regulations, see *Country codes* section. Also see the *Reset Settings* command description in the control panel section glossary.

Chapter A3 Installing a basic system

Installing the NetworX V3

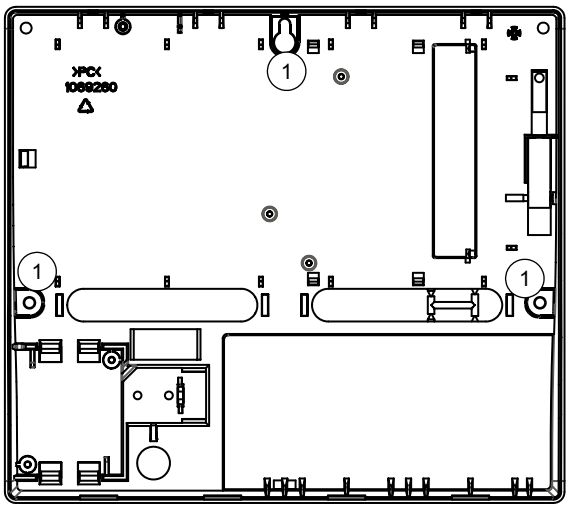
CAUTION: Before installing the panel:

- Ensure that the unit is mounted on a flat, solid, vertical surface so that the base will not flex or warp when the mounting screws/bolts are tightened.
- Leave a 50 mm clearance between equipment enclosures mounted side by side and 25 mm between the enclosure and the cable pathway.
- The battery mounting facility inside the housing is only useful for steady state use of the control panel. Remove the battery for transport of the control panel.
- Take care that wire terminals are isolated. Use tie wraps to prevent contact with any other wires or circuits in case wires break.

Polycarbonate housings

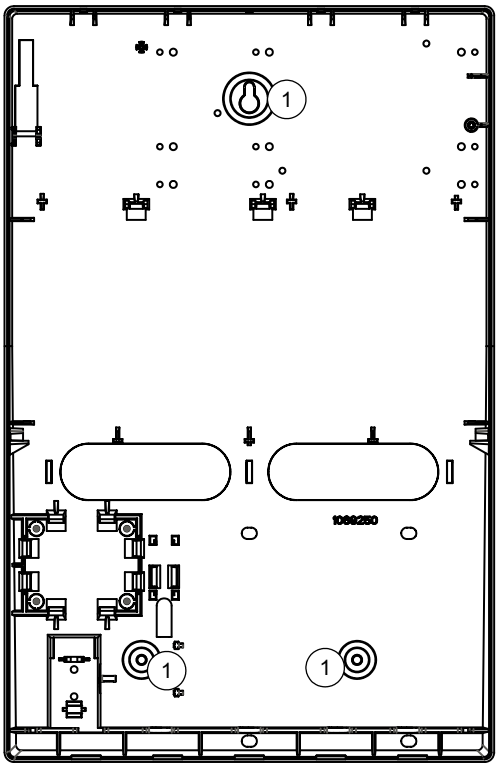
Small polycarbonate housing is adequate for systems with a just a single additional module installed (usually the TCP/IP module).

Figure 5. Small polycarbonate housing



When expanding the small system, switching to the large polycarbonate box may be required, since more modules cannot physically fit the smaller housing.

Figure 6. Largel polycarbonate housing



Mount the panel housing on the wall using mounting holes shown as items (1) in Figures 5 and 6.

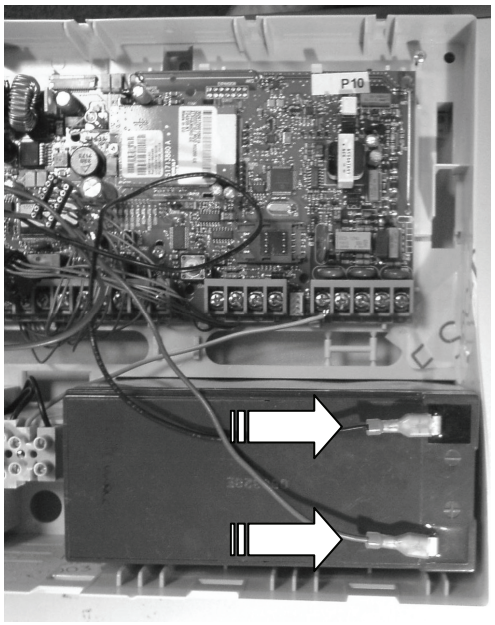
To install the panel:

1. Unscrew the holding screw in the polycarbonate housing.
2. Open the box.
3. Lift off the lid of the box.

If you are using an additional module:

4. Connect the NetworX bus cables to the module.
5. Connect the NetworX bus cables from the additional module to the panel. Use one of the internal bus connectors for this purpose (see *Figure 1*, position (2), (3) and (22)).
6. Clip-in the TCP/IP module inside the housing cover.
7. Connect the Ethernet cable to the TCP/IP module (see instructions in the NX-590E module manual).
8. Connect the battery leads to the battery and power up the panel.

Figure 7. Connecting the battery to the panel.



9. Close the housing.

Installing the keypad

Mounting the wireless keypad

Depending on the configuration, the wireless keypad can be mounted on the wall in a cradle or used as a portable device.

To install a wireless keypad:

Figure 8. Mounting the wireless keypad.

1. Ensure that the keypad is mounted on a flat, solid, vertical surface so that the base will not flex or warp when the mounting screws/bolts are tightened.

2. Mount the keypad cradle ❶ on the wall using the mounting holes.
3. Place the keypad in the cradle inserting the bottom edge first ❷, and carefully push the top until the keypad snaps in place.

Note: To replace keypad batteries, see the *Battery replacement* section on page 157, and the *Battery replacement* chapter in the *NetworX V3 User Guide*.

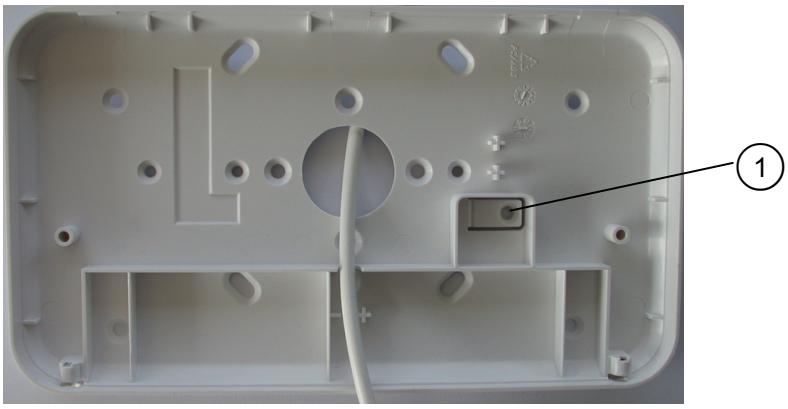
Note: Any unauthorized opening of the battery compartment will cause tamper alarm in the system.

Mounting the wired keypad

There is also an option to use wired keypads with the NetworX V3 system. To install a wired keypad:

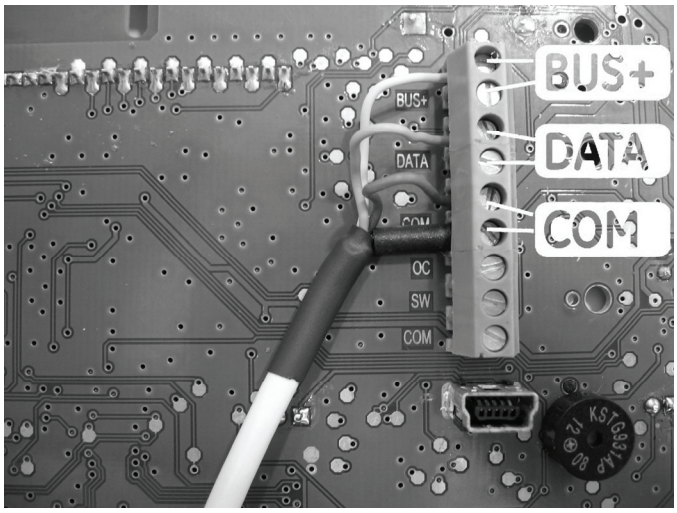
1. Run the NetworX bus cable to the appropriate location on the wall. Insert the cable into the cable opening in the wired keypad's backplate.

Figure 9. Wired keypad's backplate



2. Mount the backplate of the keypad on the wall using the mounting holes. Using a screw, fasten the tamper trigger ① to the wall.
3. Connect the shielded NetworX bus wires to the connector block (BUS+, DATA, COM) on the keypad board, and additionally connect the shielding to COM (see *Figure 10*). Isolate the NetworX bus wires and shielding correctly to prevent any short circuits on the keypad.

Figure 10. Wired keypad connector block.



4. At the panel side, run the NetworX bus wires through the ferrite (see *Figure 11*, position ①), making one loop, and connect the wires to the standard NetworX bus contacts (see *Figure 1*, position ④). Additionally, connect the shielding to COM (see *Figure 11*, position ②).

Figure 11. Panel connector block and the ferrite.

5. Carefully close the keypad and tighten the 2 screws at the bottom side.

Note: Any opening of the keypad enclosure will cause tamper alarm in the system.

6. Power up the panel. Select a language from the list with the ↑↓ keys and press **OK**.
7. Select default settings from the *Load Country Defaults* list with the ↑↓ keys and press **OK**.
8. At the *Partition Number* prompt, type the partition number and press **OK**.
9. At the *Keypad Number* prompt, type the keypad number and press **OK**.

There is a slight difference in keypad reaction speed between the wired and wireless keypad, because the wireless keypad needs more time to communicate with the control panel. Please allow appropriate time to send data between the panel and the wireless keypad, especially during programming, when large amount of information is exchanged.

Wireless keypad learning-in procedure

Prior to installing a new wireless keypad into the system, the keypad should first be "learned-in" by the panel in order to guarantee mutual recognition. With the first keypad successfully installed, the installer can use this keypad to help learning-in additional ones. The installer can also delete any or all of the keypads from the system.

For adding the first wireless keypad to the panel, the keypad learn-in procedure should be executed as shown below. For instructions about installing additional wireless keypads, see *Learning-in additional wireless keypads* section.

1. Power up the panel. It starts the learning mode automatically. The panel stays in this mode for 2 minutes allowing you to program the first wireless keypad. If the keypad does not communicate with the panel in this time window, the learning mode is exited. The learning mode can be restarted by switching panel power off and on again.
2. Insert the batteries in the wireless keypad. It starts the keypad initialization process.

   Note: If the keypad is not brand new (i.e. it was already used with another system), it must be re-programmed (flashed) first to erase any previous keypad settings, otherwise it will not initialize the learning mode (see *Chapter B11 Updating firmware* on page 255).

3. Select a language from the list with the ↑↓ keys and press **OK**.
4. Select default settings from the *Load Country Defaults* list with the ↑↓ keys and press **OK**.
5. At the *Partition Number* prompt, type the partition number and press **OK**.
6. At the *Keypad Number* prompt, type the keypad number and press **OK**.
7. At the *SysID-KID1-KID2* prompt, 3 values need to be entered:
   - **SysID**: this value represents the System ID or a 3 digit code which should be unique for this panel.
   - **KID1**: this value represents Keypad ID 1 and contains the first 3 digits of the code which should be unique for this wireless keypad.
   - **KID2**: this value represents Keypad ID 2 and contains the last 3 digits of the code which should be unique for this wireless keypad. Each of these three values must range from 001 to 255. If any typed value is incorrect, the keypad displays the blank *SysID-KID1-KID2* prompt again. The combination of unique panel and wireless keypad identifiers is required in order a wireless keypad is to communicate with the appropriate panel only. In case multiple wireless keypads are used on the same panel, each wireless keypad should have different KID1 and KID2 values.
8. At the *EncKey* prompt, enter a 24-digit encryption key and press **OK**. This encryption key is to secure the wireless communication link between the panel and wireless keypad(s) and is unique for each panel. Any 24-digit value can be entered. The same encryption key must be entered in case other wireless keypads are enrolled.

9. The keypad communicates with the panel and sends data entered in steps 3 to 8. The *Learn-in Mode* message displays briefly.

10. The keypad is learned-in and displays the *System Ready* message.

Important: You should not program zero-only strings (for example, "000") as values for SysID, KID1, KID2 nor Encryption Key, as it will make the keypad non-operational.

Note: If the learned-in keypad's configuration stored in the RF receiver, differs from the actual keypad's configuration, the RF receiver will start the configuration copying process. It takes a couple of seconds, and during this process the keypad displays the "Copying" message. During this operation, due to an intensive radio communication, you should not perform any additional actions on other wireless keypads.

Installing the wireless sirens

In order to guarantee communication between the panel and the siren, each siren must be learned-in. This procedure requires starting the learn-in mode in the control panel with the menu, and then tripping the tamper switch of the siren. For all steps required to program a new siren, see *Learning-in wireless sirens* on page 176.

To install the wireless siren:

1. Select the appropriate location to install the siren, and mount the siren base to the wall.

2. Insert the batteries to power the siren. In case of the indoor siren, the battery holders for four (4) AA 1.5 V batteries and one (1) 9 V battery are located inside the housing of the siren. In case of the outdoor siren, you should install the battery pack inside the housing of the siren. The battery pack contains independent batteries for the speaker and the beacon.

3. Wire the battery pack to the siren's terminals.

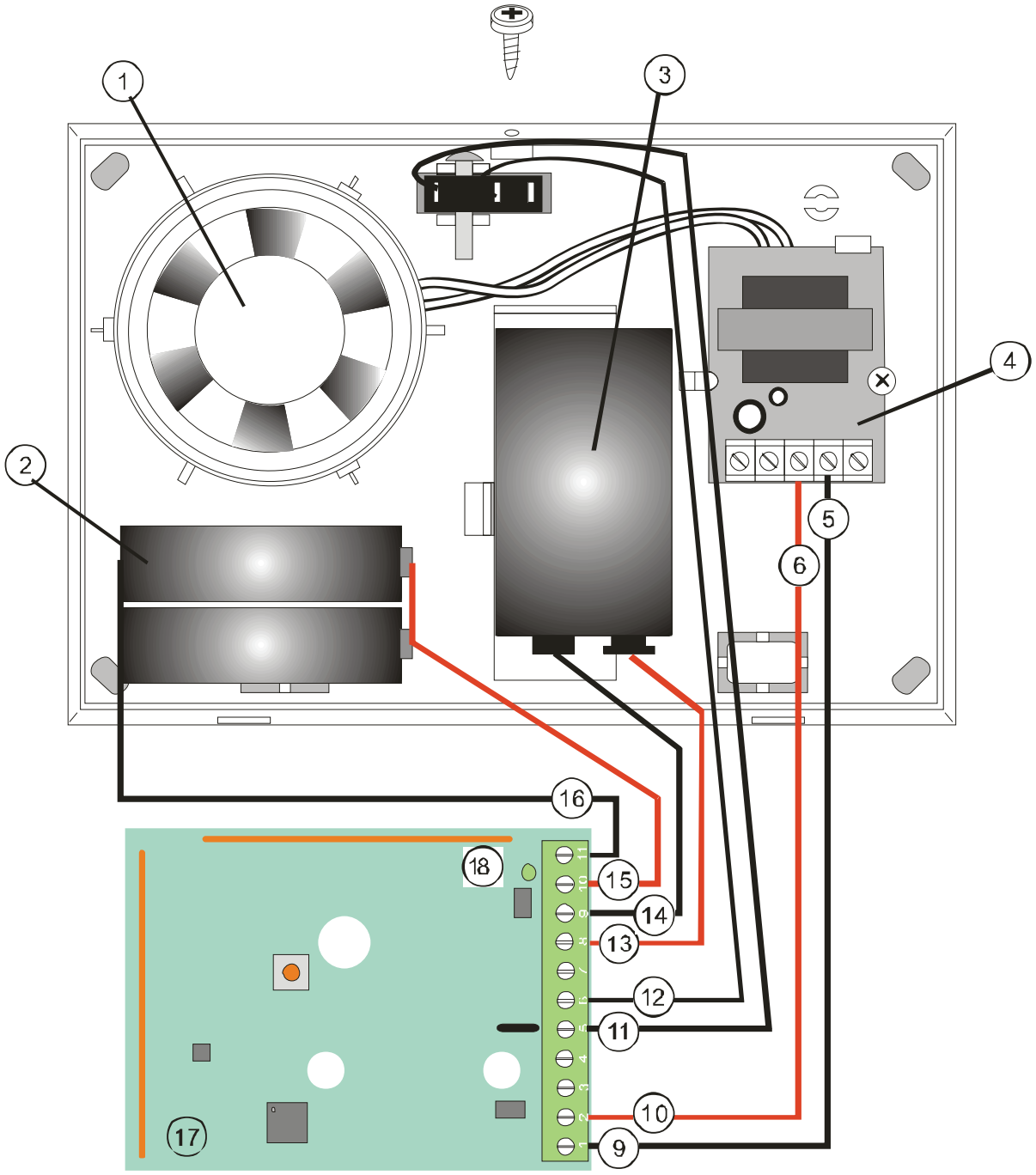
4. Learn-in the siren (see *Learning-in wireless sirens* on page 176).

5. When installing the outdoor siren, before final commission cut jumper J3 on the siren PCB. This jumper is used as start-up protection.

6. Close the cover plate on the siren.

CAUTION: When replacing siren's batteries follow instructions in the siren's manual delivered with your device. Batteries can explode or cause burns when recharged, incorrectly (dis)assembled, or exposed to fire or high temperatures. Dispose of used battery according to battery directive instructions and/or as required by local laws. Keep away from children. Always use batteries that are from the same batch, and always replace all batteries with fresh ones simultaneously.

Figure 12. Wireless indoor siren



1	Speaker	11	Tamper
2	4x AA battery pack	12	Tamper
3	9 V battery	13	9 V battery terminal (+)
4	Siren PCB	14	9 V battery terminal (-)
5	Siren driver (-)	15	4x AA battery pack (+)
6	Siren driver (+)	16	4x AA battery pack (-)
9	Open collector output (-)	17	IO module PCB

⑩ Open collector output (+)

TX-7001-05-1 Wireless indoor siren specifications

Power supply specifications		
Electronics	Number and type of batteries	4 x AA size, 1.5 V, primary cell
	Battery capacity	5600 mAh
	Board operating voltage	2.1 V ... 3.1 V ⎓
Siren part	Number and type of batteries	1 x 9V size block, primary cell
	Battery capacity	600 mAh
	Operating voltage	9 V ... 12 V ⎓
	Battery lifetime (typical)	3 years *
	Current consumption – IO module (typical)	160 uA at 3.1 V ⎓ ± 5%
	Current consumption – siren (typical)	105 mA at 12 V ⎓ ± 5%
General feature specifications		
Environmental	Operating temperature	–10 °C to +40 °C
	Humidity	max 95%, non condensing
	Shipping weight	470 g
	EN 50131 grade and class	Securtity Grade 2, Environmental Class II
	Certification	CE EN 50131-1 System requirements EN 50131-4 Warning devices EN 50131-5-3 Requirements for interconnections equipment using radio frequency techniques Tested and certified by Telefication B.V.

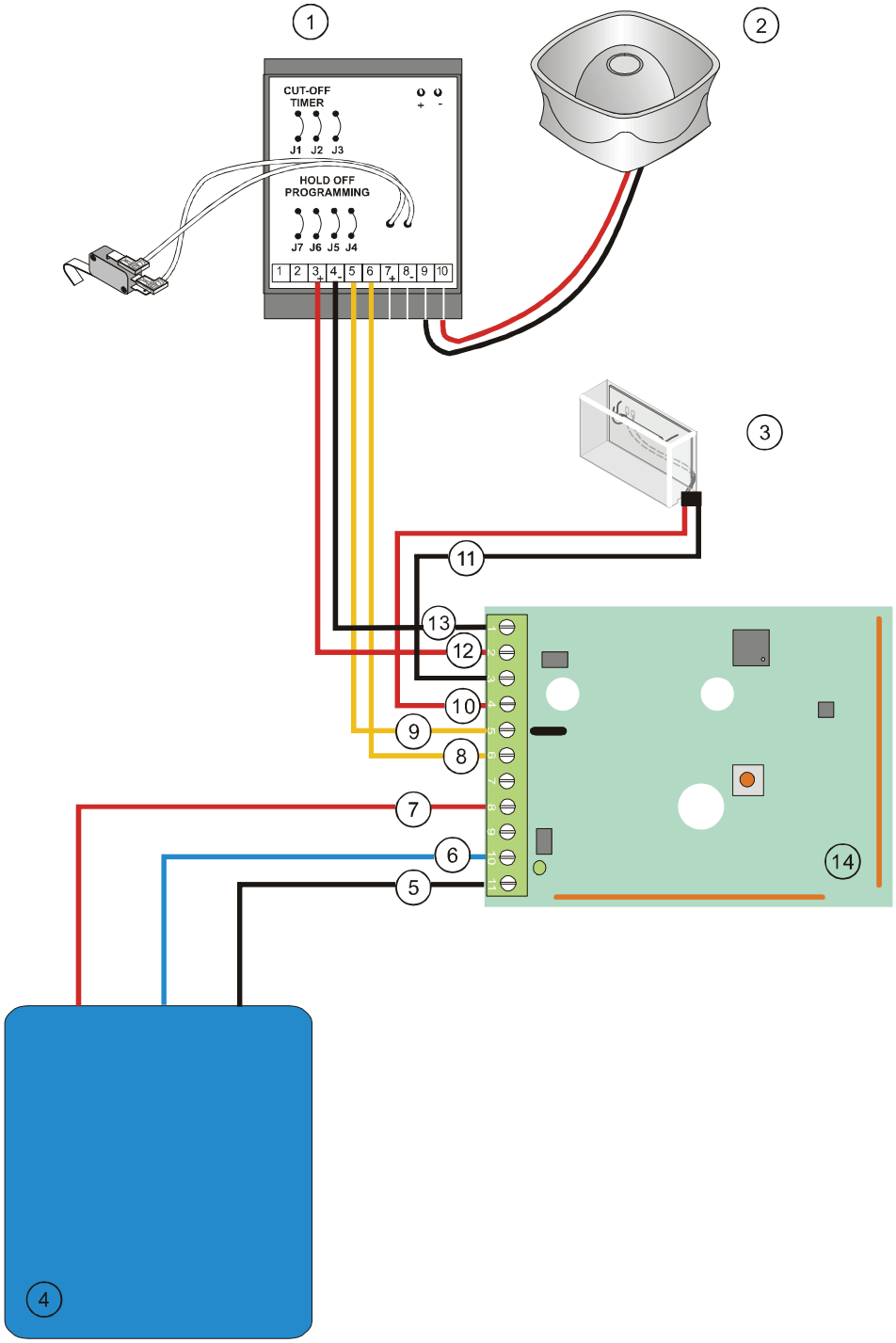
* Assumption: maximum 20 siren activations of 3 minutes per year.

Wireless I/O module specifications

Power supply specifications	
Number and type of batteries	4 x AA size, 1.5 V, primary cell
Battery capacity	5600 mAh
Board operating voltage	2.1 V ... 3.1 V ⎓
Battery lifetime, typical	3 years
Current consumption	160 uA at 3.1 V ⎓ ± 5%

General feature specifications		
Number, type and rating of outputs		2 x O/C, 15 V / 3 A max
Number and range of inputs (if wire jumper cut)		1 x, range 0 V ... +15 V
Environmental	Operating temperature	–10 °C to +55 °C
	Humidity	max 95%, non condensing
	Shipping weight	96 g
	EN 50131 grade and class	Securtity Grade 2, Environmental Class II

Figure 13. Wireless outdoor siren



1. Siren PCB
2. Speaker
3. Beacon
4. 3X lithium battery pack
5. IO module power cable (black)
6. IO module power cable (blue)
8. Tamper
9. Tamper
10. Open collector output 2 (+) for beacon
11. Open collector output 2 (-) for beacon
12. Open collector output 1 (+) for speaker
13. Open collector output 1 (-) for speaker

(7) IO module power cable (red)

(14) IO module PCB

To allow the IO module to control the output on the outdoor siren, you need to cut jumper 3 and then optionally 1 and/or 2.

Jumper 3 is a start-up protection. Jumpers 1 and 2 are responsible for timer settings, and you can cut one of them or both, according to the table below. The maximum siren activity time is limited both by hardware (jumper) setting, and software (*RF Receiver 32>Outputs>Siren/IO>Time*) time setting, whichever is shorter. For example, even if the software setting for a siren is set at 255 minutes, and the jumper J1 is cut, the siren will sound for 5 minutes only (i.e. according to the hardware limit). When the same jumper is cut, and the time value for the Siren/IO module is set to 1 minute, the siren will stop after 1 minute.

Timer programming		
Setting	**J1**	**J2**
3 minutes (ex-factory)		
5 minutes		
10 minutes		
20 minutes		

TX-7201-05-1 Wireless outdoor siren specifications

Power supply specifications	
Number and type of batteries	3-cell custom battery pack, lithium
Battery capacity	14 Ah
Electronics, board operating voltage	3.5 V ⎓
Siren/flash light part operating voltage	10.5 V ⎓
Battery lifetime (typical)	3 years *
Current consumption – IO module (typical)	160 uA at 3.5 V ⎓ ± 5%
Current consumption – siren (typical)	293 mA at 10.5 V ⎓ ± 5%
Current consumption – beacon (typical)	53 mA at 10.5 V ⎓ ± 5%

General feature specifications		
Environmental	Operating temperature	–25 °C to +50 °C
	Humidity	max 95%, non condensing
	Shipping weight	2.6 kg
	EN 50131 grade and class	Security Grade 2, Environmental Class III
	Certification	CE EN 50131-1 System requirements EN 50131-4 Warning devices EN 50131-5-3 Requirements for interconnections equipment using radio frequency techniques Tested and certified by Telefication B.V.

* Assumption: maximum 20 siren activations of 3 minutes and beacon activations of 15 minutes per year.

Installing the wireless sensors

Mounting the sensors

1. Select the appropriate location to place the sensor. For recommendations and rules regarding a correct placement of the particular sensor (motion sensor, door/window, smoke, etc.), see the sensor manual enclosed with the device you want to install.
2. Fasten the sensor base to the wall.
3. Place the sensor battery in the battery holder.
4. Re-install the sensor board and the cover plate.

Sensor learning-in procedure

In order to guarantee mutual recognition, each installed sensor must be learned-in by the control panel. This procedure usually requires starting the learn-in mode in the control panel with the menu, and then tripping the tamper switch in the sensor. For all steps required to program a new sensor, see the section *Programming the wireless detectors* on page 173.

Chapter A4 Programming guidelines

Getting started

This chapter describes a NetworX V3 installation with the menu driven keypad allowing you to program the system easily using a menu structure.

Country codes

The NetworX V3 has the ability to set different "country codes". Each country code has specific default settings. When you start your system for the first time (see *Powering up the system* below) and select keypad defaults during the initial keypad setup, the respective country code is also set up automatically for the panel. Once the country code has been selected, it will remain set, even after an installer reset. When changing the country code during programming, all existing programming will be cleared to the defaults for that country.

Note: For a detailed first keypad installation description, see *Wireless keypad learning-in* procedure on page 32.

The table below lists the default country codes.

Table 9. Country codes

Code	Country
0	No country (factory setting)
1	Holland
2	Belgium / Poland
3	Sweden
4	Italy
5	Spain
6	Greece
7	South Africa
8	Israel
9	Spain (PRSGR)
10	Turkey
11	France
17	Turkey Pronet
50	US

For all the countries there are the following default codes:

Table 10. Default codes

User code	Installer code	Download access code
1234	9713	84800000

Note: Press **NO** key to clear any incorrectly entered user code or other information.

Powering up the system

When the NetworX V3 is powered up for the first time, the keypad language, keypad defaults, partition and keypad number must be set. These options must also be set each time a keypad is defaulted.

5. The *Set KP Language* option sets the first language of the keypad.
6. The *Load Country Defaults* option sets the country specific keypad defaults. It does not default the keypad.
7. The *Partition Number* and *Keypad Number* options set the keypad address.

Use the navigation keys to scroll between the different options and press **OK** to select an option. See *Navigating the menus* for more information.

Prior to installing a wireless keypad into the system, the keypad should first be "learned-in" by the panel in order to guarantee mutual recognition. See the *Wireless keypad learning-in* procedure section for step-by-step instructions.

Entering programming mode

Your installer code allows you to program the system through the installer menu. There are two levels in the installer menu. The light menu contains the most important options and the advanced menu contains additional options. The system cannot be armed while in programming mode on the current keypad or another keypad.

1. Press **OK** at the system prompt and enter your installer code. For a list of default codes, see the *Country codes* section.
2. Use the ↑↓ keys to navigate the menu. The full menu map can be found in the *Menu Structure* included in your language kit. The light menu is in green text and the advanced menu is in black text.
3. Select **OK** to select an option or use the numerical/character keys to edit the existing option.

Note: The light installer menu is displayed by default. To switch to advanced menu, navigate to *Installer Menu>Maintenance Mode>Advanced* and select *Enabled*. The keypad displays the advanced menu until this option is disabled.

Changing the user interface language

1. Press **OK** at the system prompt.
2. Press **OK** again to display the system prompt in a different language.
3. Press **OK** until you find the language you require.
4. Continue using the keypad as normal.

Note: When the NetworX V3 is powered up for the first time, only the single language selected during keypad installation is available. To toggle the user interface language, the available languages must be defined first (*Installer Menu>This Keypad>Set KP Language>Language 1* to 4.)

Navigating the menus

- Press the ↑↓ keys to scroll through menu lists and options.
- Press #↑ to move to the same menu item for the previous option. For example, if you are in a submenu for zone 2, press #↑ to move to the same submenu for zone 1.
- Press # ↓ to move to the same menu item for the next option. For example, if you are in a submenu for zone 2, press #↓ to move to the same submenu for zone 3.

Note: The keypad may timeout from the menu system and return to the default display.

Quick User Menu

You can access a limited number of menu options without entering your installer code or user code. This opens the command menu. Commands available in the Quick User Menu allow, for example, to quickly preview the alarm memory list, reset detectors or start the service check.

1. Press **OK** at the system prompt.
2. Press the ↑↓ keys to enter and navigate the Quick User menu.

Selecting a menu option

- Press **OK** to select a menu option and move forward in the menu structure.
- Press **NO** to reject a menu option and move backwards in the menu structure.
- Press ← **(F4)** to move through the second line of the LCD display, one word at a time, from right to left.
- Press → **(F5)** to move through the second line of the LCD display, one word at a time, from left to right.

Changing a menu option

The NetworX V3 has several editors that you can use to change the value of certain programmable menu options. You can change selection list entries, binary entries, phone numbers and text. This section describes how to change selection list entries, binary entries, numeric entries and phone numbers. For information on changing text, see *Editing text*.

Changing selection list entries

1. Navigate with the ↑↓ keys to the relevant menu option and press OK.
2. The current value for the menu option is displayed, for example, Enabled.
3. Press the ↑↓ keys to change the value, for example, change Enabled to Disabled.
4. Press OK to accept the change.
   - If the new value is valid, the keypad beeps once to confirm the change and returns to the menu option.

- If the new value is invalid, the keypad beeps three times to reject the change and returns to the menu option.

5. Press **NO** to cancel the change and return to the menu option.

Changing binary entries

1. Navigate with the ↑↓ keys to the relevant menu option and press **OK**.
2. The current value for the menu option is displayed, for example, *1 2 3 - - - - 8* means that 1, 2, 3 and 8 are on (included) while 4, 5, 6 and 7 are off (excluded).
3. Press the corresponding numerical key to change a value, for example, press **1** to change the state of 1 to off and press **4** to change the state of 4 to on. The display changes to *- 2 3 4 - - - 8*.
4. Press **OK** to accept the changes.
   - If the new values are valid, the keypad beeps once to confirm the change and returns to the menu option.
   - If the new value is invalid, the keypad beeps three times to reject the change and returns to the menu option.
5. Press **NO** to cancel the changes and return to the menu option.

Changing numeric entries

1. Navigate with the ↑↓ keys to the relevant menu option and press **OK**.
2. The current value for the menu option is displayed, for example, 55.
3. Do one of the following:
   - Press a number key to clear the current value and display the value of the key pressed.
   - Press ↑ to increase the current value by one.
   - Press ↓ to decrease the current value by one.
   - Press ## to clear the current value to 0.
4. Press the number keys to enter the value.
5. Press **OK** to accept the changes.
   - If the new value is valid, the keypad beeps once to confirm the change and returns to the menu option.
   - If the new value is invalid, the keypad beeps three times to reject the change and returns to the menu option.
6. Press **NO** to cancel the changes and return to the menu option.

Changing phone numbers and phone prefixes

1. Navigate with the ↑↓ keys to the relevant menu option and press **OK**.
2. The current value for the menu option is displayed, for example, *4567999*.

3. Do one of the following:
   - Press ↑ to toggle between insert mode and overwrite mode (insert mode allows you to insert new numbers and overwrite mode allows you to overwrite existing numbers).
   - Press ↓ to delete the number at the cursor position.
   - Press #↓ to delete all the numbers from the number at the cursor position to the end of the string.

4. Do one of the following:
   - Press the keys **0** to **9** to insert new numbers.
   - Press **#0** to insert G (to use the GSM instead of the PSTN).
   - Press **#1** to insert a star.
   - Press **#2** to insert #.
   - Press **#3** to insert a four-second delay.
   - Press **#4** to insert P (this enables pulse dialing).

5. Press **OK** to accept the changes.
   - If the new number is valid, the keypad beeps once to confirm the change and returns to the menu option.
   - If the new number is invalid, the keypad beeps three times to reject the change and returns to the menu option.

6. Press **NO** to cancel the changes and return to the menu option.

Exiting the menu system

1. Press **NO** repeatedly until *OK to Exit* prompt displays.

Note: If you are not in a value selection mode nor in a value edit mode, you can press **##** to display the *OK to Exit* prompt. It also means you can exit any menu level immediately by pressing [NO] [#] [#].

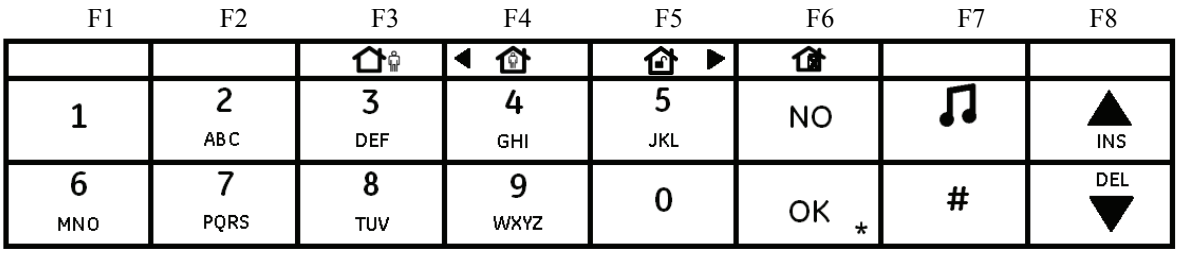
2. Press **OK** at this prompt to exit the menu system.

After exiting the menu system all devices in the system are enrolled, and changed texts are sent to all keypads in the system. When it happens, “Processing” and “Copying” messages are displayed respectively on the keypads. It can take some time, especially in case of wireless keypads, and it is always recommended to allow these processes to finish without entering anything on the keypad.

Editing text

Overview

The NetworX V3 has a text editor that includes a word library. You can use this editor to change the text of certain programmable text options.



1. Navigate with the ↑↓ keys to the relevant menu option and press **OK**.
2. Press **OK** to select the language you want to edit.
3. The current text for the menu option is displayed, for example, *Zone 2*.
4. Do one of the following:
   - Press ↑ to toggle between insert mode and overwrite mode (insert mode allows you to insert new text and overwrite existing text).
   - Press ↓ to delete the character at the cursor position.
   - Press #↓ to delete all the characters from the character at the cursor position to the end of the string.
5. Press the keys **0** to **9** to insert new characters. Each key cycles through lower case and then upper case characters.
6. Press **OK** to accept the changes. The keypad beeps once to confirm the change and returns to the menu option.
7. Press **NO** to cancel the changes and return to the menu option.

Note: A flashing cursor highlights the character you are editing. Press **F2** to toggle flashing on the current word.

Example

To change a zone name from *Zone 2* to *Upstairs*:

1. Navigate to *Zone 2* and press **OK**.
2. Press **#F4** to go to the start of the zone name.
3. Press **#F5** to go to the end of the zone name.
4. Press **#↓** to delete all the characters.
5. Press **8** four times to enter the upper case letter ‘U’.
6. Press **7** once to enter the lower case letter ‘p’. Continue until you have entered the new zone name.
7. Press **OK** to save your changes.

Note: Each character key cycles through lower and upper case letters and language specific characters.

Word library

The word library is a predefined collection of words that speeds up text editing. As you type a character, the keypad automatically displays a matching word. The word library is enabled by default. For a complete list of words in the word library, see *Appendix 6: Word library words*.

- To accept the word, press **F5**. The cursor moves to the end of the new word and you can continue to enter text.
- To create a shortened version of the word, press **F5** to accept the word. The cursor moves to the end of the new word. Move the cursor to the first unnecessary character and press #↓ to delete the end of the word.
- To reject the word, continue entering text as normal.
- Press the ↑↓ keys to scroll through the list of word library words.

To disable the word library:

1. Navigate with the ↑↓ keys to *Word Library* and press OK.
2. The current state of the word library is displayed. In this case, it is enabled.
3. Use the ↑↓ keys to change the state to disabled and press OK.
4. The keypad beeps once to accept the change and returns to *Word Library*.

Note: In case of wireless keypads, user texts (user names, zone names, etc.) are copied from the keypad to the RF receiver first and then sent to the target keypad (or one-by-one to consecutive keypads). It takes some time, and can sporadically affect other communication with the source/target keypad, including false state of the range indicator and/or status icons. It is a temporary state, and after copying is finished all icons will again show correct state of the system.
Due to the large number of data being transmitted, it is recommended that no other operations are performed during copying as it can affect operation of the system. It applies in particular to the wireless keypads.

Guidelines for location-based programming

You can switch to location-based programming mode. This mode uses devices, locations and segments. Please notice, that the recommended programming method is to use the menu structure rather than devices and locations. In order to use location-based programming, follow the procedure below:

1. Press **OK** and type your installer code (factory default is 9713). If the installer code is valid, the *OK=LOC* ↑↓*=MENU* screen displays.
2. At the *OK=LOC* prompt press **OK**. The *"Enter the device address"* screen displays. You are now in the program mode and ready to select the module to program.

Note: It is impossible to enter program mode if any partition - or the system - is armed.

Selecting the module to program

Since all the modules connected to the NetworX system are programmed through the keypad, the module you are programming should be the first entry. For example, to program the NetworX control panel, enter [0]-[#]. The [0] is the module number of the control panel and the [#] is the entry key. Other module entry numbers can be found in the corresponding manuals or in *Appendix 2: Overview*

of module numbers on page 261. The procedure for programming these devices is the same as for the control panel, except that the location will be for the module selected.

Programming a location

Note: Before programming the panel, the correct country code must be set in location 213 or through the installer menu, with *This Keypad>Load Country Defaults* menu option. It is selected during the first keypad installation, see *Wireless keypad learning-in* procedure on page 32.

Once you have entered the number of the module to be programmed, the LCD screen will prompt you for a location number. Any location can be accessed by directly entering the desired programming location, followed by the crosshatch (pound) [#] key. If the location you enter is valid, the top line of the LCD screen will display the location number on the left and the segment number on the right. The bottom line of the display will show the current data. This data will be displayed and entered according to the type of data used (numerical, binary, or character data). For instructions about entering each type of data, see *Changing a menu option* on page 41. If editing data, confirm the change by pressing the **OK** key.

Exiting the program mode

When you have made all the desired changes in programming, it is time to exit the program mode. Press the **NO** key twice to exit this programming level, and go to the *"Enter the device address"* level. If no additional modules are to be programmed, press the **NO** key twice again to display the *OK to Exit* prompt, and press **OK** to exit the program mode. If there is another module to be programmed, you can select it by entering its address, followed by the [#] key (see *Selecting the module to program* above).

Note: If you are not in a value selection mode nor in a value edit mode, you can press **##** to display the *OK to Exit* prompt. It also means you can exit any menu level immediately and display the *OK to Exit* prompt by pressing [NO] [#] [#].

Note: You can set up the timeout for the program mode using the *Control Panel>System Settings>Timers>Miscellaneous>Programming Mode Timeout* menu option, or by programming location 40, segment 14.

Chapter A5 Setting up a communicator

Reporting

The NetworX system supports different modes of reporting events to multiple central stations. There are three phone numbers - each phone number has it own account code, protocol and events. The configured prefix is common to all three phone numbers. If a four-second delay is specified in the prefix, the panel does not look for a dial tone, but performs blind-dialling. The following scenarios are examples of how to set different modes of reporting.

Reporting to one phone number

The control panel reports events to one central station only. You specify settings for phone number 1. Events for phone number 1 are enabled by default.

Note: The characters B, C, D, E, F can be used in control panel account codes. The letter 'A' cannot be used as part of the code as it is a termination digit.

Table 11. Setting up reporting

Level 1	Level 2	Value	State
Phone Number	Phone Number 1	123456	
	Phone Number 2		
Account Code	Phone Number 1	BE5566	
	Phone Number 2		
Protocol	Phone Number 1	SIA	
	Phone Number 2		
Events	Phone Number 1 – Alarms		Enabled
	Phone Number 1 – Alarm Restores		Enabled
	Phone Number 1 – Tampers and Restores		Enabled
	Phone Number 2 – Alarms		
	Phone Number 2 – Alarm Restores		
	Phone Number 2 – Tampers and Restores		

Backup reporting

Backup reporting configures the control panel to report to two or more central stations. The first phone number belongs to the main central station and all other phone numbers belong to the backup central stations. Events are reported to the first number but, if the panel cannot reach this number, it dials the backup number(s). The control panel makes two calls to each number in sequence. It

performs the sequence for the number of times specified in *Dial Attempts* or until it receives a kiss off. The same account code is used to report to all numbers. Events for phone number 1 are enabled by default and events for phone numbers 2 - 3 are disabled by default. If phone number 1 and phone number 2 are programmed, the default sequence is 1,1 2,2 1,1,2,2 for a total of eight calls to each number.

Table 12. Backup reporting

Level 1	Level 2	Value	State
Phone Number	Phone Number 1	123456	
	Phone Number 2	456789	
Account Code	Phone Number 1	BE5566	
	Phone Number 2	445566	
Protocol	Phone Number 1	SIA	
	Phone Number 2	SIA	
Events	Phone Number 1 – Alarms		Enabled
	Phone Number 1 – Alarm Restores		Enabled
	Phone Number 1 – Tampers and Restores		Enabled
	Phone Number 2 – Alarms		Disabled
	Phone Number 2 – Alarm Restores		Disabled
	Phone Number 2 – Tampers and Restores		Disabled

Dual reporting

Dual reporting configures the control panel to report to two different central stations. Events must be reported to both phone numbers. The control panel dials the first number twice. If it cannot reach this number, it dials the second number twice. It performs this sequence for the number of times specified in *Dial Attempts* or until it reports the events to both numbers. The same account code is used to report to both numbers. Events for phone number 1 are enabled by default and events for phone number 2 are disabled by default.

Table 13. Dual reporting

Level 1	Level 2	Value	State
Phone Number	Phone Number 1	123456	
	Phone Number 2	456789	
Account Code	Phone Number 1	BE5566	
	Phone Number 2	445566	

Level 1	Level 2	Value	State
Protocol	Phone Number 1	SIA	
	Phone Number 2	SIA	
Events	Phone Number 1 – Alarms		Enabled
	Phone Number 1 – Alarm Restores		Enabled
	Phone Number 1 – Tampers and Restores		Enabled
	Phone Number 2 – Alarms		Enabled
	Phone Number 2 – Alarm Restores		Enabled
	Phone Number 2 – Tampers and Restores		Enabled

Split reporting

Split reporting configures the control panel to report to two different central stations. Some events must be reported to phone number 1 and others to phone number 2. The control panel dials the first number twice. If it cannot reach this number, it dials the second number twice. It performs this sequence for the number of times specified in *Dial Attempts* or until it reports the relevant event to each number. The same account code is used to report to both numbers. Events for phone number 1 are enabled by default and events for phone numbers 2 are disabled by default.

Table 14. Split reporting

Level 1	Level 2	Value	State
Phone Number	Phone Number 1	123456	
	Phone Number 2	456789	
Account Code	Phone Number 1	BE5566	
	Phone Number 2	445566	
Protocol	Phone Number 1	SIA	
	Phone Number 2	SIA	
Events	Phone Number 1 – Alarms		Enabled
	Phone Number 1 – Alarm Restores		Enabled
	Phone Number 1 – Tampers		Disabled
	Phone Number 2 – Alarms		Disabled
	Phone Number 2 – Alarm Restores		Disabled
	Phone Number 2 – Tampers and Restores		Enabled

Section B Programming the system

Chapter B1 Selecting the programming mode

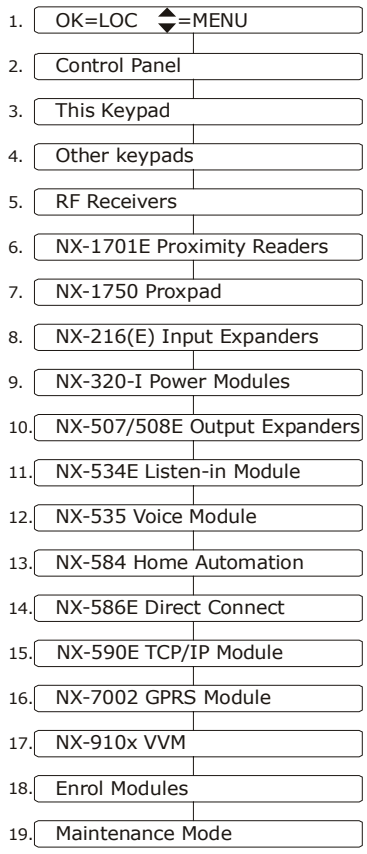
The NetworX V3 system allows to use two different programming modes — location-based programming or menu-based programming. In location-based programming you use locations and segments to set appropriate values. In menu-based programming you use a menu tree to enable/disable particular options or to set values. To select the programming mode:

3. Press **OK** at the system prompt and enter your installer code.
4. The *OK=LOC* ↑↓*=MENU* prompt displays.
5. Press **OK** to select the location-based programming mode or navigate with the ↑↓ keys through the menu to work in the menu-based programming mode.

For general information about navigating menus, and entering or selecting values, see Chapter A4 *Programming guidelines* on page 39. For general information about location-based programming, see *Guidelines for location-based programming* on page 45.

The basic menu structure is as follows:

Figure 14. Installer menu overview



Note: For NX xV1 panels when entering the installer menu, the menu tree is limited to the following entries: *Device/Loc*, *Enrol Modules*, *This Keypad* and *Other Keypads*.

Note: Recording and playback of voice messages (for example, for NX-535) cannot be performed with the NX-1048 location mode. You can record and play voice messages using the menu system only.

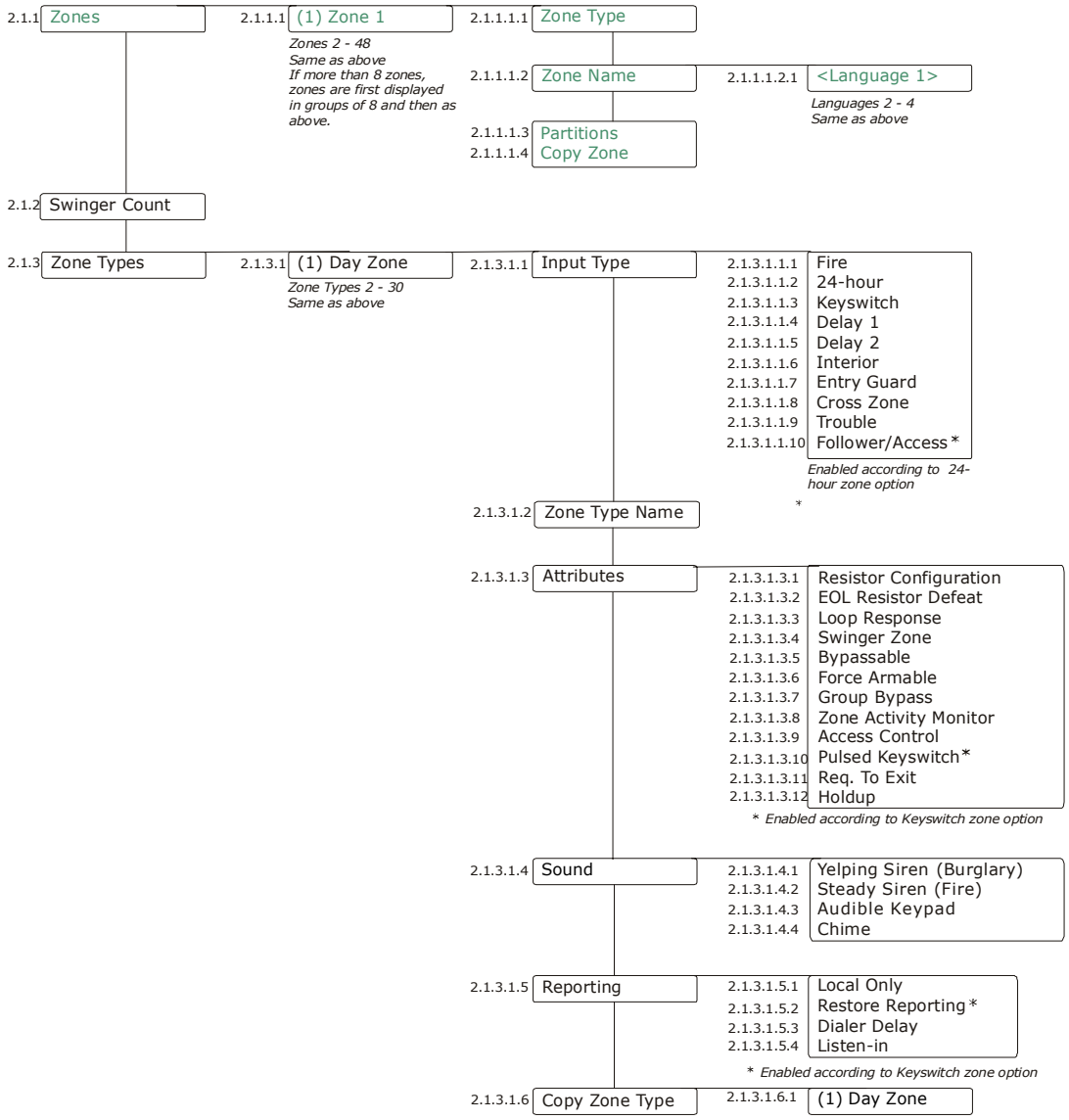
Chapter B2 Programming the control panel

Overview

You must default the control panel before you begin to program the system. For more information on enrolling and defaulting, see *Chapter B7 Enrolling modules*.

Programming inputs

Figure 15. Inputs menu



An input or zone represents a single input in the system.

A zone may reside in any combination of partitions. A zone that resides in more than one partition becomes a common zone and is reported to its lowest partition number. A common zone is armed only when all the partitions that it belongs to are armed. It is immediately disarmed when one of the partitions it belongs to is disarmed.

The control panel can have a maximum of two on-board hardwired inputs, and a total of 48 zones (wired and wireless together).

There are 30 pre-defined zone types. All zone types can be edited by changing their characteristics.

Table 15. Default zone types

Zone Type	Description of default configuration
Day Zone	Instant when system is armed; trouble zone when system is disarmed. It is permanently active 24 hours a day unless bypassed by forced arming.
24 Hour Audible	Creates an instant yelping siren alarm regardless of the arming state of the control panel. This zone type is not abortable, but it can be bypassed.
Entry/Exit 1	A trip will start entry delay 1. Absence of a trip during the exit delay will enable the Automatic Bypass or Instant mode, if so programmed.
Follower	This zone will be instant when the system is armed and no entry or exit delays are being timed. It is delayed during entry and exit delay times. This zone will not bypass automatically, even if the *Group Bypass* command is active.
Interior Follower with Auto-Bypass	This zone will be instant when the system is armed and no entry or exit delay is being timed. It is delayed during entry and exit delay times. This zone will bypass automatically, if enabled by the *Group Bypass* command.
Instant	This zone creates an instant alarm whenever it is tripped and the system is armed.
24 Hour Silent	Creates an instant silent alarm regardless of the arming state of the control panel. It will not display on the keypad. This zone is not abortable, but it can be bypassed.
Fire	Indicates a fire zone. This zone cannot be bypassed. The system will rapidly flash the Fire symbol on the keypad and sound the steady siren each time the zone is shorted. To acknowledge the fire alarm a user must enter the user code. After the alarm has been cancelled the Fire symbol still displays on the keypad until a user selects the *Detector Reset* menu option from the *Quick User* (or *User*) menu.
Entry/Exit 2	A trip will start entry delay 2. Absence of a trip during the exit delay will enable the automatic bypass or instant mode, if so programmed.
24 Hour Audible Supervised	Creates an instant audible alarm, regardless of the arming state of the control panel. It will display on the keypad. This zone is not abortable and cannot be bypassed.
Keyswitch Momentary	This zone type will arm and disarm the partition or partitions of the control panel where it is resident, every time the zone state changes for a short time from R to 2R (for example, the Door-Window Switch is momentarily opened and then closed). Keyswitch arming will report as User 99 in logs and reports. This zone type can only belong to one partition.
Interior Follower with Cross Zone	This zone will be instant when the system is armed and no entry or exit delay is being timed. It is delayed during entry and exit delay times. If a "Cross Zone" is not being timed, it will start a "Cross Zone" timer. If a "Cross Zone" is being timed, it will create an instant alarm. This zone will bypass automatically, if enabled by the *Group Bypass* command.
Instant Entry Guard	This zone creates an instant alarm whenever it is tripped and the zone is timed. It will start an entry delay time 2 if it is tripped, provided that the system is armed and the stay/instant mode is on.
Entry/Exit 1 with Group Bypass	A trip will start entry delay 1. This zone will bypass when the "Group Bypass" command is entered at the keypad. Absence of a trip during exit delay will enable the automatic bypass or instant mode, if so programmed.
Interior Follower with Group Bypass	This zone will be instant when the system is armed and no entry or exit delays are being timed. It is delayed during entry/exit delay times. This zone will bypass when the "Group Bypass" command is entered at the keypad. This zone will bypass automatically, if enabled by the *Group Bypass* command.
Instant with Group	This zone creates an instant alarm whenever it is tripped and the system is armed. This zone will

Bypass	bypass when the "Group Bypass" command is entered at the keypad
Keyswitch Maintained	This zone type will arm/disarm the partition or partitions of the control panel where it is resident, as long as the zone state is changed from R to 2R (for example, the Door-Window Switch is opened or closed) and kept in this state. Keyswitch arming will report as User 99 in logs and reports.
Entry/Exit 1 Force Armable	A trip will start entry delay 1. Absence of a trip during exit delay will enable the automatic bypass or instant mode, if so programmed. This zone is force armable, which means the system can be "Force Armed" even if this zone has been violated. In this condition, the "Ready" icon will flash indicating the zone is not secure. At the end of the exit delay, the zone will be bypassed. If the zone becomes secured at any time during the arming cycle, it will be unbypassed and will become active in the system. If "Bypass Report" is enabled, the force arming zones can be programmed to report bypass when they are force armed (default).
Entry/Exit 2 Force Armable	A trip will start entry delay 2. Absence of a trip during exit delay will enable the automatic bypass or instant mode, if so programmed. This zone is force armable (see description above).
Entry/Exit 1 with Chime	A trip will start entry delay 1. Absence of a trip during exit delay will enable the automatic bypass or instant mode, if so programmed. When the control panel is disarmed and the chime mode has been set, this zone will act as a chime zone.
Audible Technical Alarm Supervised	Any trip on a technical zone creates an audible alarm, regardless of the arming state of the control panel. This zone can be bypassed.
Silent Technical Alarm Supervised	Any trip on a silent technical zone creates a silent alarm, regardless of the arming state of the control panel. Only the transmitter will be activated. This zone can be bypassed.
Interior Instant	This zone creates an instant alarm whenever it is tripped during the arming state of the control panel. This zone will bypass automatically, if enabled in segment 1 of location 23, or when this system is armed in the "Stay" mode.
Instant Chime	A trip will create an alarm when the system is armed. When the control panel is disarmed and the chime mode has been set, this zone will act as a chime zone.
Follower Chime	This zone will be instant when the system is armed and no entry or exit delays are being timed. It is delayed during entry and exit delay times. This zone will not bypass automatically, even if the *Group Bypass* command is active. When the control panel is disarmed and the chime mode has been set, this zone will act as a chime zone.
24 Hour Audible Local Supervised	Creates an instant audible alarm, regardless of the arming state of the control panel. It will display on the keypad. This zone type will NOT be reported.
Instant Force Armable	This zone creates an instant alarm whenever the system is armed. This zone is force armable.
Instant Monitor Activity	This zone creates an instant alarm whenever the system is armed. It will send a report if the zone activity time is reached without a change of state.
Instant EOL Defeat	This zone creates an instant alarm whenever the system is armed. When the loop is closed, the zone is ready. Opening of the loop means a faulted zone.
24 Hour Medical Audible Supervised	Creates an instant audible alarm, regardless of the arming state of the control panel. It will display on the keypad. A medical report will be sent to the CMS.

Defining a zone

You must select the language in which to program the new name and also assign partitions to the zone. You can select the zone type and zone name for each new zone. The following steps explain how to select the zone type and zone name for a new zone.

1. Navigate with the ↑↓ keys to *Control Panel>Inputs>Zones* and press **OK**.
2. Select the zone number of the new zone to be configured and press **OK**.
3. Select *Zone Type* and press **OK**.
4. Scroll to the relevant zone type and press **OK**.
5. Select *Zone Name* and press **OK**.

6. Scroll to the relevant language and press **OK**. The current name for zone is displayed, for example, *Zone 1*.
7. Press ↑ to enter overwrite mode and press the keys **0** to **9** to insert new characters.
8. Press **OK** to accept the changes.
9. The keypad beeps once to confirm the change and returns to *Zone Name*.
10. Scroll to *Partitions* and press **OK**. The current partition(s) for that zone are displayed, for example, *1 - - -* means that the zone is assigned to partition 1.
11. Press the corresponding numerical key to include or exclude a partition, for example, press **1** to exclude partition 1 and press **3** to include partition 3. The display changes to - - 3 -. The zone is now assigned to partition 3. You can assign a zone to multiple partitions (common zone).
12. Press **OK** to accept the changes.
13. The keypad beeps once to confirm the change and returns to *Partitions*.

Copying zone settings

You can copy the settings for the current zone to another zone or a set of other zones. All the zone settings (except the user defined zone name and RF settings) are copied to the target zones. The following steps explain how to copy the settings from one zone to another.

1. Navigate with the ↑↓ keys to *Control Panel>Inputs>Zones* and press **OK**.
2. Select the relevant zone number and press **OK**.
3. Scroll to *Copy Zone* and press **OK**.
4. The keypad prompts you to enter the start zone.
5. Enter the number of the first zone to which the settings will be copied and press **OK**.
6. The keypad prompts you to enter the end zone.
7. Enter the number of the last zone to which the settings will be copied and press **OK**.
8. The keypad prompts you to confirm your selection.
9. Press **OK**.
10. *Copying* message is displayed while the zone settings are copied. When copying is complete, the keypad beeps once and returns to *Copy Zone*.

Editing a zone type

A zone type is a collection of characteristics. All the zones included in a particular zone type share the same characteristics. Each zone must belong to a zone type. There are 30 pre-defined zone types which you can edit. To edit a zone type, you must enable the advanced menu. The following example edits a Day Zone zone type so that the input type is 24-hour (i.e. creates an alarm when triggered even if the partition it belongs to is disarmed) and it can be automatically bypassed after five alarms within one arm period.

1. Ensure the advanced menu is enabled.
2. Navigate with the ↑↓ keys to *Control Panel>Inputs>Zone Types* and press **OK**.
3. Select *Day Zone>Input Type>24-hour>Yes* and press **OK**.

4. The keypad beeps once to confirm the change and returns to *24-hour*.
5. Scroll to *Attributes>Swinger Zone>Yes* and press **OK**.
6. The keypad beeps once to confirm the change and returns to *Swinger Zone*.
7. Set the value of *Inputs>Swinger Count* to 5. For more information see *Setting swinger count* below.

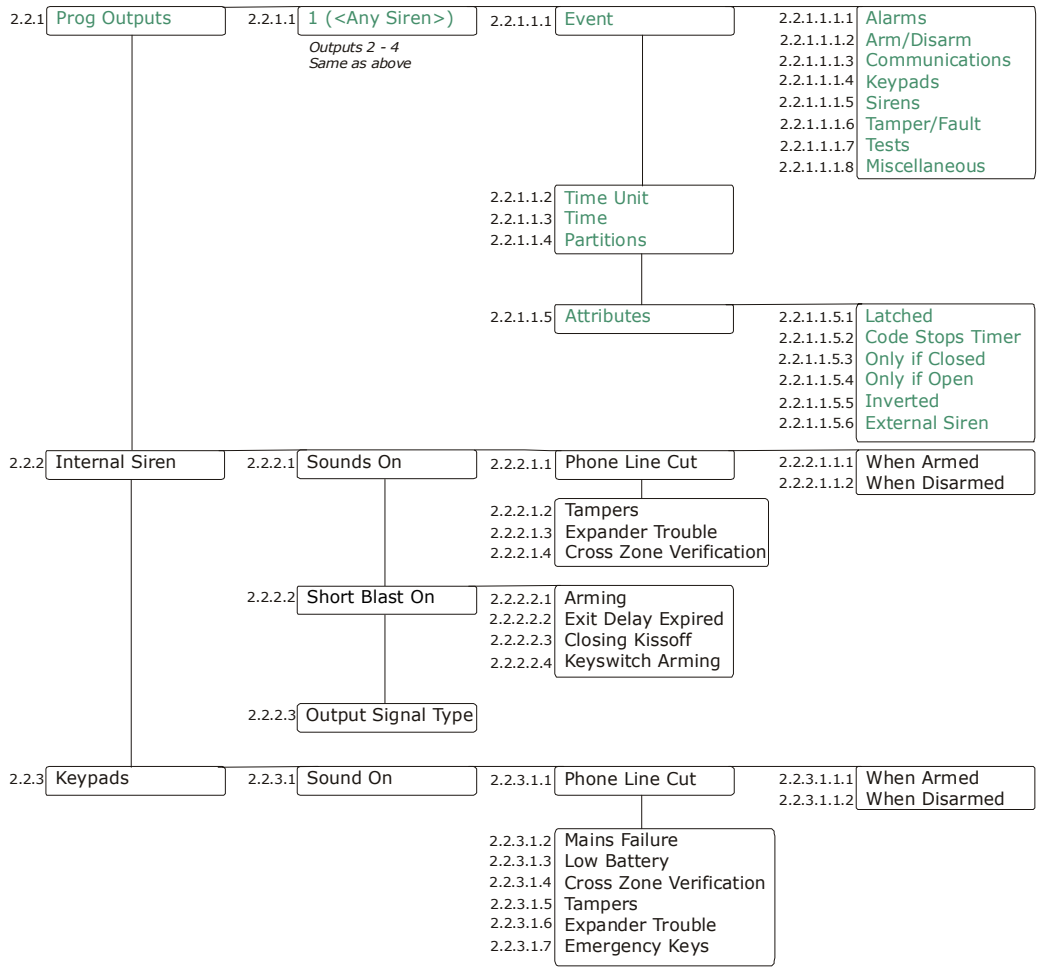
Setting swinger count

The swinger shutdown function allows the selected zone to be automatically bypassed after a specified number of alarms. To configure swinger count, you must enable the advanced menu. The following example sets swinger count to 5. This means that any zone for which swinger shutdown is enabled can be activated five times within one arm period before it is automatically bypassed. Bypassing a swinger zone also resets the counter for that zone to zero.

1. Ensure the advanced menu is enabled.
2. Navigate with the ↑↓ keys to *Control Panel>Inputs>Swinger Count* and press **OK**.
3. Enter **5** and press **OK**.
4. The keypad beeps once to confirm the change and returns to *Swinger Count*.

Programming outputs

Figure 16. Outputs menu



The control panel includes up to 2 programmable on-board auxiliary outputs. To program on-board outputs, select *Installer Menu>Control Panel>Outputs.*

Configuring an output

You can change the characteristics of each output. You must specify the events and/or partitions that activate an output and the length of time for which the output is activated. The events are grouped in the programming tree. A full list of all possible selectable events can be found in the *Table 16, Control panel output events*. The following example configures output 1 to activate for 15 minutes when a burglary alarm occurs.

1. Navigate with the ↑↓ keys to *Control Panel>Outputs>Prog Outputs>Output 1* and press **OK**.
2. Scroll to *Event>Alarms>Burglary Alarm* and press **OK**.
3. The keypad beeps once to confirm the change and returns to *Alarms*.
4. Scroll to *Time Unit>Minutes* and press **OK**.

5. The keypad beeps once to confirm the change and returns to *Time Unit*.
6. Scroll to *Time* and press **OK**.
7. Select *15 min.* and press **OK** to accept the changes.
8. The keypad beeps once to confirm the change and returns to *Time*.

Table 16. Control panel output events

Data	Event	Data	Event
0✓	Burglary alarm	30	Open period
1✓	Fire alarm	31	Closed period
2✓	24 hour alarm	32	Listen-in
3✓	Trouble alarm	33	Line seizure
4	Tamper alarm	34	Reserved
5	Yelping siren	35	Fail to communicate
6	Steady siren	36	Telephone line fault
7	Any siren	37	Program mode
8	Any bypass	38	Download in process
9	AC fail	39	Reserved
10	Low battery	40	Short circuit (overcurrent on 12 V DC)
11✓	Duress	41	Box tamper
12✓	Aux 1 keypad (fire alarm)	42	Siren tamper
13✓	Aux 2 keypad (medical alarm)	43	Any open
14✓	Panic keypad	44	Any short
15	Keypad tamper	45	Any fault (open/short on non-fire zone)
16✓	Automatic test	46✓	Any alarm
17	Alarm memory (solid)	47	Audible keypad
18	Entry	48✓	Code entry (see note below)
19	Exit	49✓	Keyfob function 1
20	Entry or exit	50✓	Keyfob function 2
21	Armed state	51	Always ON
22	Disarmed state	52	Autoarm warning time
23	Ready	53	Any siren when in away mode
24	Not ready	54	Progress of entry/exit (follows keypad buzzer)
25	Fire	55	Auxiliary communication failure
26	Fire trouble	56	Radio test
27	Chime	57	Any siren when armed in any mode
28✓	Expander trouble	58	Alarm memory (pulsating)
29	Dynamic battery test time	59	Zone inactivity

✓ If set to follow condition, these events are one second.

Note: When Event 48 is programmed, it is possible to program a user code's authorization to select which output(s) a particular code activates.

Configuring the internal siren

You can specify conditions and/or events that activate the internal siren. To configure the internal siren, you must enable the advanced menu. The following example configures a short blast of the internal siren when the system is armed using a keyswitch.

1. Ensure the advanced menu is enabled.

2. Navigate with the ↑↓ keys to *Control Panel>Outputs>Internal Siren>Short Blast On* and press **OK**.
3. Scroll to *Keyswitch Arming>Yes* and press **OK**.
4. The keypad beeps once to confirm the change and returns to *Keyswitch Arming*.

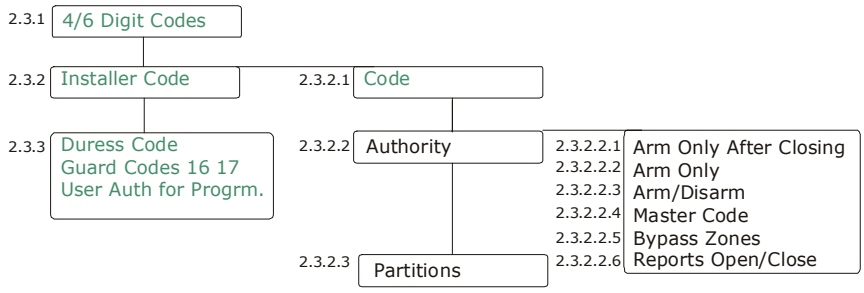
Programming the keypad sounder

You can specify conditions and/or events that activate the keypad sounder. To configure the sounder, you must enable the advanced menu. The following example programs the keypad sounder to activate when an expander trouble condition occurs.

1. Ensure the advanced menu is enabled.
2. Navigate with the ↑↓ keys to *Control Panel>Outputs>Keypads>Sound On* and press **OK**.
3. Scroll to *Expander Trouble>Enabled* and press **OK**.
4. The keypad beeps once to confirm the change and returns to *Expander Trouble*.

Assigning codes

Figure 17. Installer codes menu



System codes can be either four or six digits long. This menu allows to program/change the installer code and the duress code. A duress code disarms the system and activates a duress alarm. This is a silent alarm that sends a special report to the central station. To program codes, select *Installer Menu>Control Panel>Codes*.

Note: For EN/INCERT compliance, system access ID needs to be in 6 digit format.

Setting up the installer code

An installer code may have associated arming options and access rights. To set the authority and access rights, you must enable the advanced menu. The following example assigns partitions 1 and 2 to a new installer code that can be used only to arm the system.

1. Ensure the advanced menu is enabled.
2. Navigate with the ↑↓ keys to *Control Panel>Codes>Installer Code>Code* and press **OK**.

3. Enter the new code and press **OK**.
4. Enter the new code and press **OK**.
5. The keypad beeps once to confirm the change and returns to *Code*.
6. Scroll to *Authority>Arm Only>Yes* and press **OK**.
7. The keypad beeps once to confirm the change and returns to *Arm Only*.
8. Navigate with the ↑↓ keys to *Partitions* and press **OK**.
9. Press the corresponding numerical key to include partitions **1** and **2** and to exclude all other partitions and press **OK**.
10. The keypad beeps once to confirm the change and returns to *Partitions*.

Setting communication options

Figure 18. Communication menu

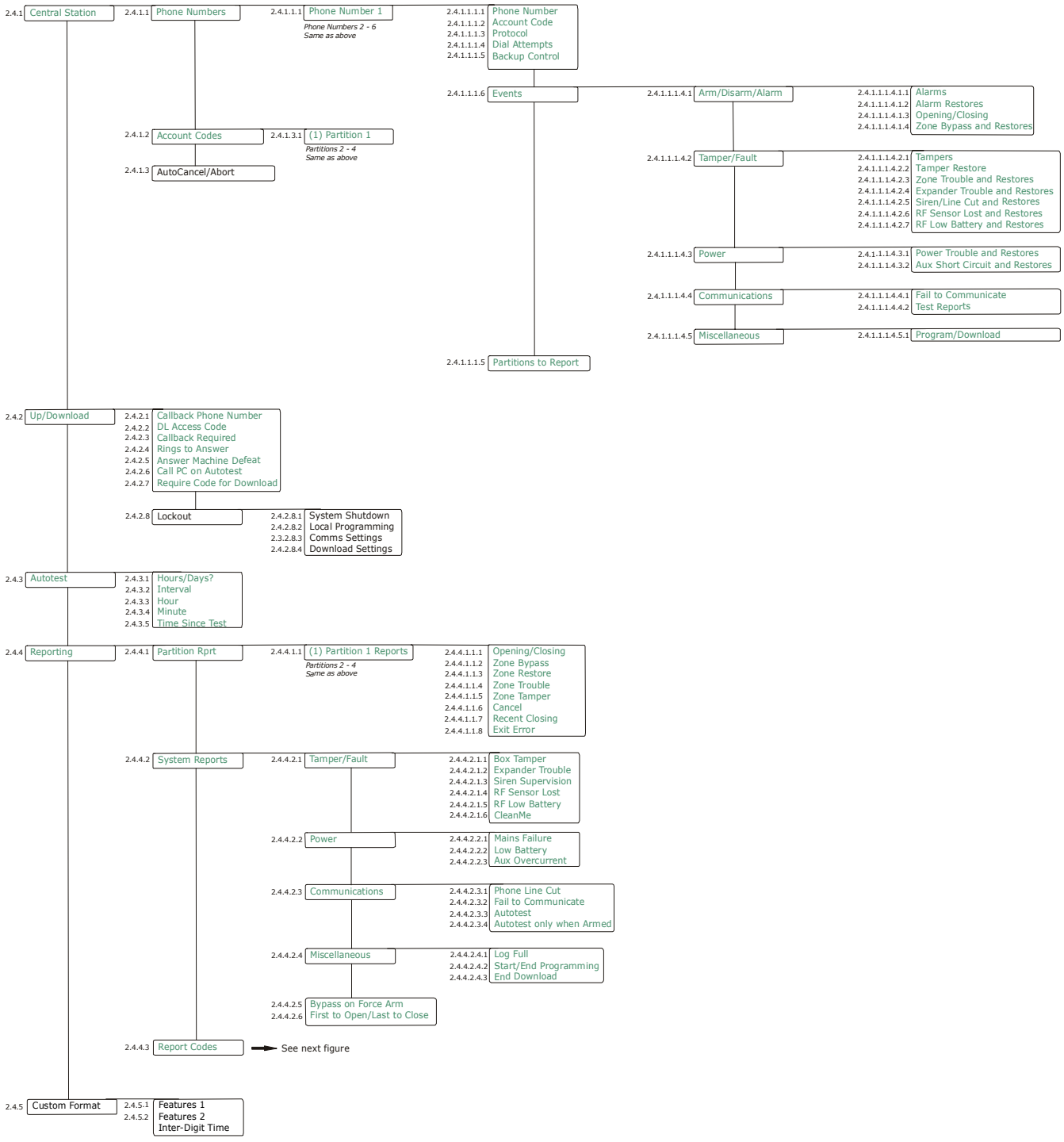
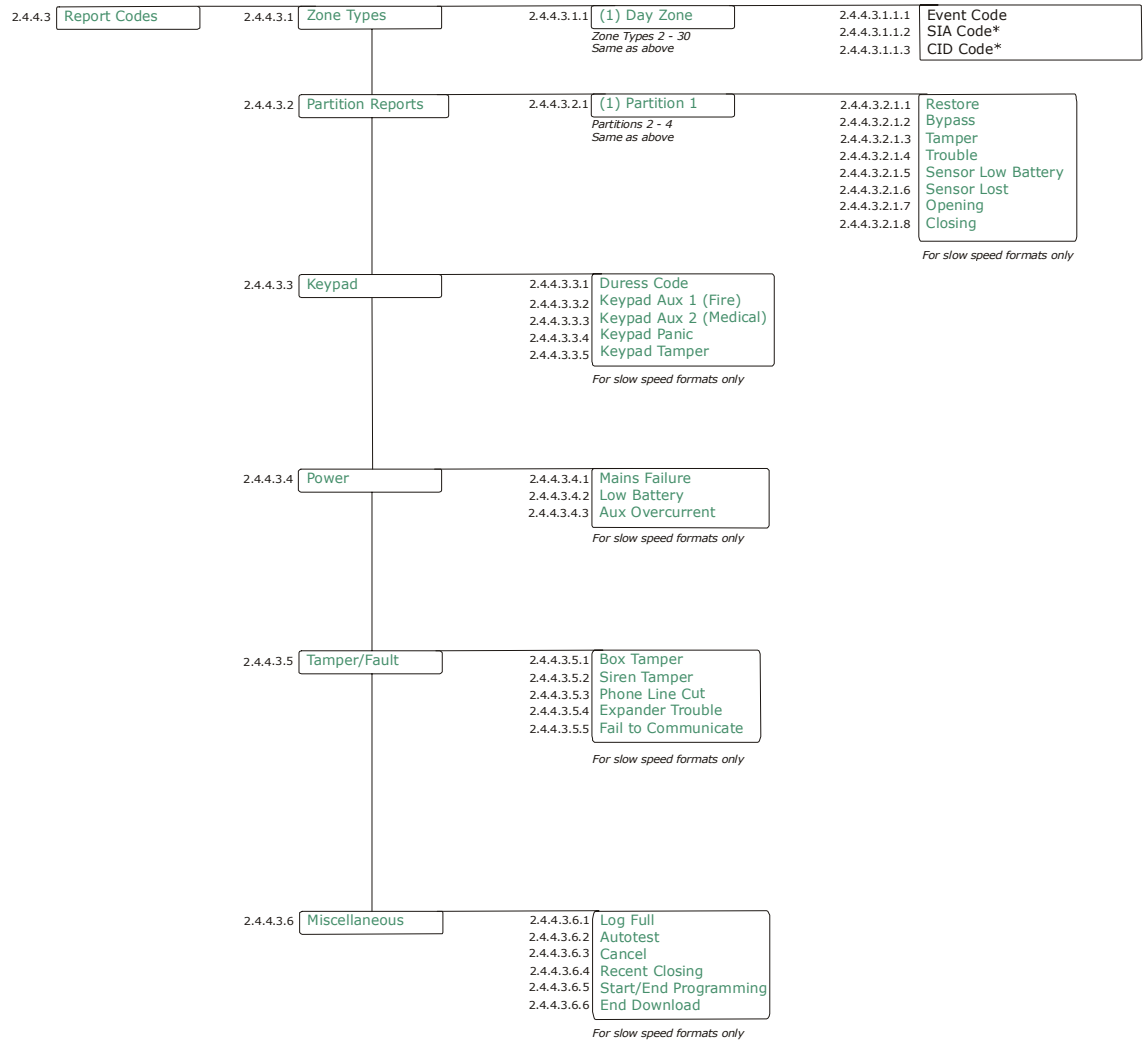


Figure 19. Report codes menu



The control panel can report to a central station after all or specified events. Communication between the control panel and the central station is monitored to ensure against damage or faults. The control panel can also communicate with up/download software when a download session has been established. To program control panel communication options, select *Installer Menu>Control Panel>Communications*.

Defining communication with a central station

You can specify up to three central stations to which the control panel reports events. You can also select the events to be reported to each station. For more information on setting up a communicator, see *Appendix 3, Communicator formats*.

You can set a number of conditions that must be met before a communication session is established between the control panel and the central station. To enable restore report options, you must enable the advanced menu.

The following example configures the control panel to ring the central station three times before a fail to communicate condition occurs for the Phone Number 1.

1. Ensure the advanced menu is enabled.

2. Navigate with the ↑↓ keys to *Control Panel>Communications>Central Station* and press **OK**.
3. Scroll to *Phone numbers>Phone Number 1>Dial Attempts* and press **OK**.
4. Select *3* and press **OK**.
5. The keypad beeps once to confirm the change and returns to *Dial Attempts*.

Defining communication with a mobile phone

You can also treat a telephone (for example, your mobile phone) as a central station. This way you can send voice messages with the NX-535 voice module (if installed) when particular events happen, or you can send a siren tone to your mobile phone in case of an alarm.

When you do not have a PSTN analog line installed, you can easily program the panel to use a built-in or external GSM dialer instead.

The following example configures the control panel to ring your phone using the built-in GSM dialer, and send a siren tone to your phone in case of an alarm.

1. Navigate with the ↑↓ keys to *Control Panel>Communications>Central Station* and press **OK**.
2. Scroll to *Phone numbers>Phone Number 2>Phone Number* and press **OK**.
3. Type **#0** to enter the letter "G", then type your phone number and press **OK**. The letter "G" at the beginning of the phone number tells the panel to use a GSM dialer (NX-7002) instead of a panel's analog dialer.
4. The keypad beeps once to confirm the change and returns to *Phone Numbers*.
5. Navigate with the ↑↓ keys to *Protocol* and press **OK**.
6. Select *Siren Tone* and press **OK**.
7. Navigate with the ↑↓ keys to *Events* and select *Arm/Disarm/Alarm>Alarms*, enable it and press **OK.** Make sure all other options under *Events* are disabled.
8. The keypad beeps once to confirm the change and returns to *Events*.
9. Navigate with the ↑↓ keys to *Backup Control*, enter **1**, and then press **OK**. Entering a "1" will cause the panel to ring your phone after executing a call to the regular central station (*Phone Number 1*.)
10. The keypad beeps once to confirm the change and returns to *Backup Control*.

Defining communication with upload/download software

You can set up a number of conditions that must be met before a communication session is established between the control panel and the up/download software. For more information on programming using the upload/download software, see Chapter B10 *Programming with the DL900 software.*

Configuring the system autotest

The autotest is run at configured intervals to ensure communication between the control panel and central station or the control panel and up/download software is functioning correctly. The following example sets the system autotest to run every Friday at 12.45, assuming that today is Wednesday.

1. Navigate with the ↑↓ keys to *Control Panel>Communications>Autotest>Hours/Days?>Days* and press **OK**.
2. Scroll to *Interval>7 days* and press **OK**.
3. The keypad beeps once to confirm the change and returns to *Hours/Days?*.
4. Scroll to *Hour>12* and press **OK**.
5. The keypad beeps once to confirm the change and returns to *Hour*.
6. Scroll to *Minutes>45* and press **OK**.
7. The keypad beeps once to confirm the change and returns to *Minutes*.
8. Scroll to *Time Since Test>5 Days* and press **OK**.
9. The keypad beeps once to confirm the change and returns to *Time Since Test*.

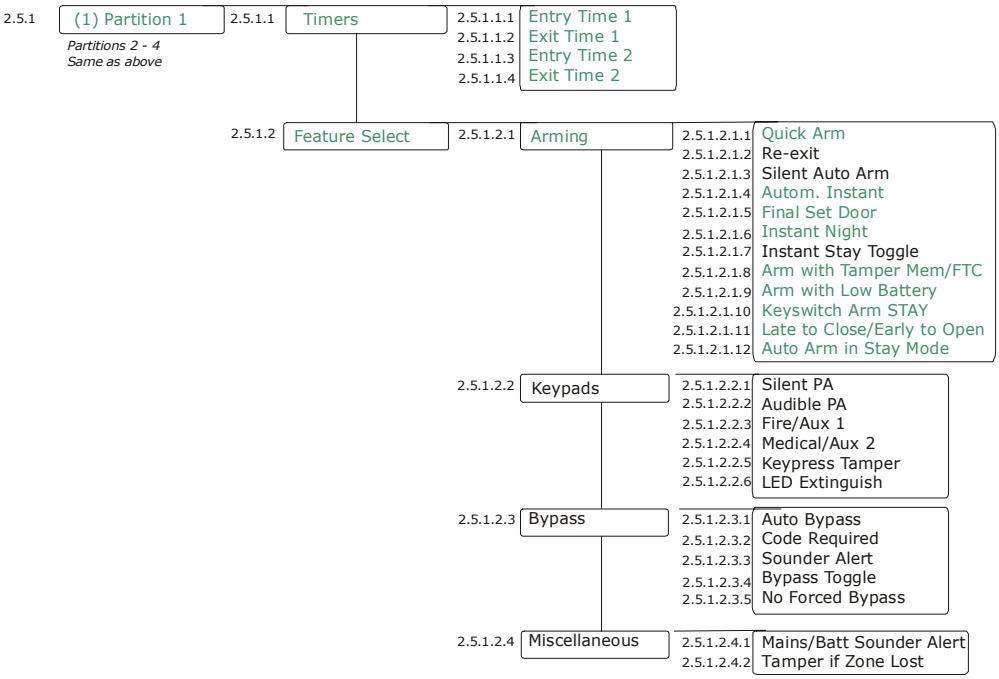
Enabling reporting

You must enable event reporting in the control panel and program the events and zone types for which reports are sent. You must specify the format of the report and, in the case of voice reports, you must map each event to a recorded message. You can map one message to a number of events. The following example enables voice reporting to phone number 2 for a phone line cut event and assigns a voice message to this event.

1. Navigate with the ↑↓ keys to *Control Panel>Communications>Central Station* and press **OK**.
2. Scroll to *Phone Numbers>Phone Number 2>Protocol>Vocal* and press **OK**.
3. The keypad beeps once to confirm the change and returns to *Protocol*.
4. Navigate with the ↑↓ keys to *Control Panel>Communications>Reporting>Report Codes>Tamper/Fault* and press **OK**.
5. Scroll to *Phone Line Cut* and press **OK**.
6. Type the number of the message that you want to map to that zone and press **OK**.
7. The keypad beeps once to confirm the change and returns to *Phone Line Cut*.

Configuring partitions

Figure 20. Partitions menu



A partition is a group of zones which operate as a unit and can be armed and disarmed independently of other partitions in the system. A partition is also known as an area. The control panel can be divided into separate partitions with distinct zones, keypad and user codes for each partition. Arming and bypass options can be set for each partition. To program partition settings, select *Installer Menu>Control Panel>Partition Settings.*

Setting timers

You can specify the time in which a user must disarm or arm a system before a full alarm occurs. The following example sets time within which the user must disarm the system (10 seconds). It also sets the time within which the user must leave the protected zone after arming the system (12 seconds).

1. Navigate with the ↑↓ keys to *Control Panel>Partition Settings>Partition 1>Timers>Entry 1* and press **OK**.
2. Enter 10 and press **OK**.
3. The keypad beeps once to confirm the change and returns to *Entry 1*.
4. Scroll to *Exit 1* and press **OK**.
5. Enter 12 and press **OK**.
6. The keypad beeps once to confirm the change and returns to *Exit 1*.

Configuring a partition

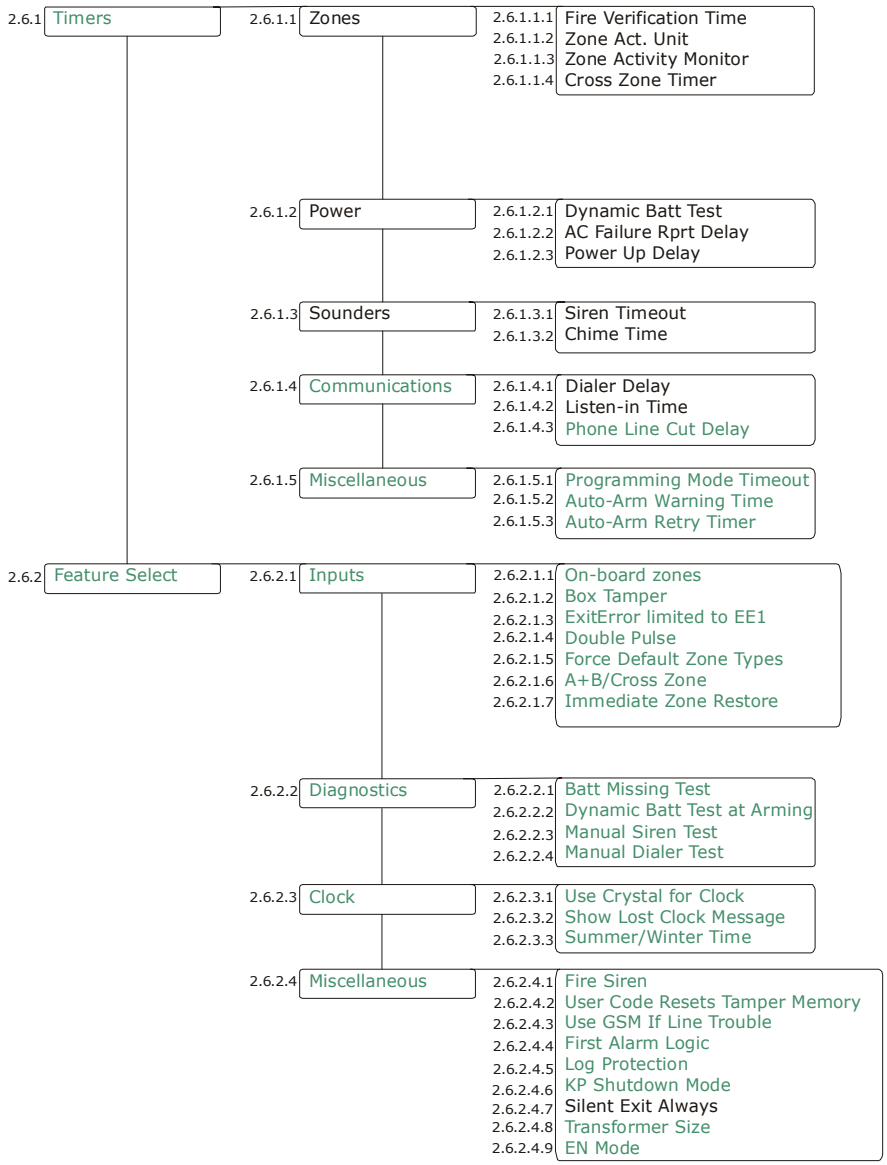
You can set partition features including arming and bypassing options. You can also enable life safety keys for the partition keypads. The following example allows the system to be armed silently according to the auto-arm schedule, and enables the personal alarm combination keys so they activate a personal attack alarm when pressed.

1. Ensure the advanced menu is enabled.
2. Navigate with the ↑↓ keys to *Control Panel>Partition Settings>Partition 1>Feature Select>Arming* and press **OK**.
3. Scroll to *Silent Auto Arm>Yes* and press **OK**.
4. The keypad beeps once to confirm the change and returns to *Silent Auto Arm*.
5. Navigate with the ↑↓ keys to *Keypads>Silent PA>Yes* and press **OK**.
6. The keypad beeps once to confirm the change and returns to *Silent PA*.

Note: When the *Silent Auto Arm* option is enabled, the partitions are armed automatically according to the schedule set with *Control Panel>Arm Schedule>Auto Arm* menu at a preset time without the keypad buzzer sounding.

Configuring the system

Figure 21. System settings menu



Configurable system settings include timers, input features, the system clock and serial port and various tests that can be performed on the control panel. To program system settings, select *Installer Menu>Control Panel>System Settings.*

Setting timers

You can set timers to control the duration of various system functions. The following example sets the internal siren timer to five minutes. When the siren starts ringing, the timer starts counting down. When the timer is finished, the siren automatically stops.

1. Ensure the advanced menu is enabled.
2. Navigate with the ↑↓ keys to *Control Panel>System Settings* and press **OK**.
3. Scroll to *Timers>Sounders>Internal Siren Timeout* and press **OK**.

4. Enter **5** and press **OK**.
5. The keypad beeps once to confirm the change and returns to *Internal Siren Timeout*.

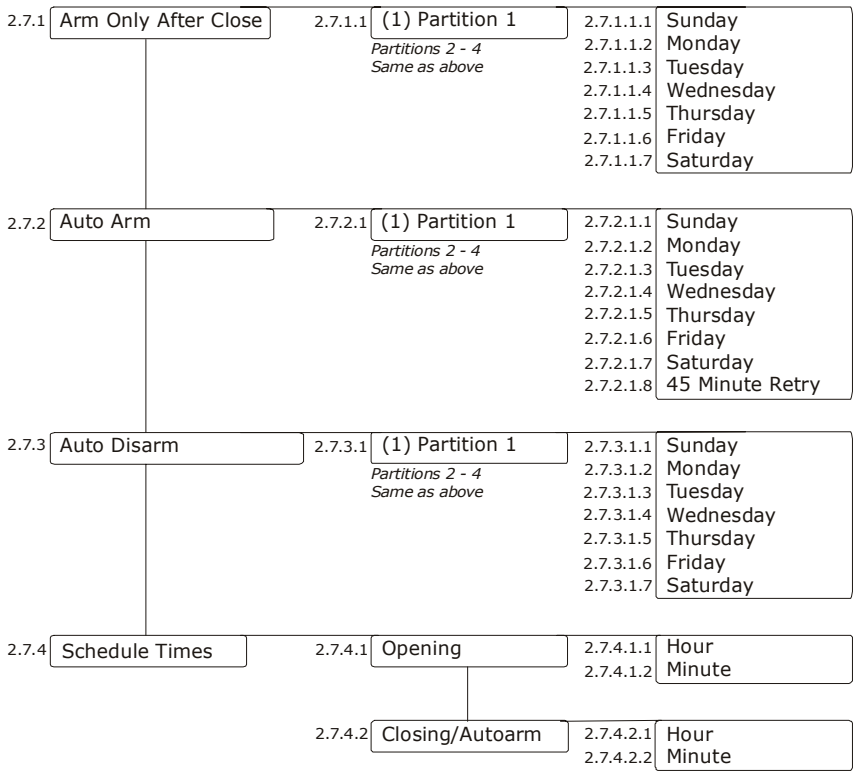
Configuring system features

You can specify various system features, enable the tests that can be performed on the control panel and set clock options. The following example programs the control panel to activate the siren and make a manual test call to the central station during the do self tests.

1. Ensure the advanced menu is enabled.
2. Navigate with the ↑↓ keys to *Control Panel>System Settings>Feature Select* and press **OK**.
3. Scroll to *Diagnostics>Manual Siren Test>Enabled* and press **OK**.
4. The keypad beeps once to confirm the change and returns to *Manual Siren Test*.
5. Scroll to *Manual Dialer Test>Enabled* and press **OK**.
6. The keypad beeps once to confirm the change and returns to *Manual Dialer Test*.

Setting arm schedules

Figure 22. Arm Schedules menu



The control panel can be programmed to automatically disarm (open) and arm (close) partitions at specified times on specified days. To program auto-arm schedules, you must enable the advanced

menu. Select *Installer Menu>Maintenance Mode>Advanced Menu>Enabled* and press **OK**. Then select *Installer Menu>Control Panel>Arm Schedules*.

Note: If reports are sent, the user code will be 97 in logs and reports.

Note: If an alarm happens during the period of time when the system is automatically armed, the system will not automatically disarm. In order to disarm the system after an alarm the user code is required.

Setting up schedules

You can set up a schedule to control the opening and autoarming events for each partition. The following example sets a schedule for partition 1 so that it is automatically closed at 18.00 on a Monday if there is no activity in the building. If there is activity at closing time, the control panel will try to arm after every 45 minutes of inactivity until the next opening time, or until the system is armed manually.

1. Ensure the advanced menu is enabled.
2. Navigate with the ↑↓ keys to *Control Panel>Arm Schedules* and press **OK**.
3. Scroll to *Auto Arm>Partition 1>Sunday>Yes* and press **OK**.
4. The keypad beeps once to accept the change and returns to *Sunday*.
5. Scroll to *45 Minute Retry>Enabled* and press **OK**.
6. The keypad beeps once to accept the change and returns to *45 Minute Retry*.
7. Navigate with the ↑↓ keys to *Schedule Times>Closing/Autoarm>Hour* and press **OK**.
8. Enter **18** and press **OK**.
9. The keypad beeps once to confirm the change and returns to *Hour*.
10. Scroll to *Minute* and press **OK**.
11. Enter **0** and press **OK**.
12. The keypad beeps once to confirm the change and returns to *Minute*.

Glossary

Location	Term	Definition
2	**Control Panel**	This groups all options relating to the central processing unit of the alarm system. The control panel monitors the detection devices and activates any number of signalling devices.
2.1	**Inputs**	A menu entry that groups options relating to all zones.
2.1.1	**Zones**	A menu entry that groups zone options.
2.1.1.1.1	**Zone Type**	A menu option that specifies the zone type of a particular zone.
2.1.1.1.2	**Zone Name**	A menu option that allows the installer to define names for each installed zone. For example, Zone 1 can be named Living Room PIR.

Location	Term	Definition
2.1.1.1.3	**Partitions**	A menu entry that lists the partitions assigned to the selected zone. The selected zone can trigger an event on these partitions. A zone may reside in any combination of partitions. A zone that resides in more than one partition becomes a common zone and is reported to its lowest partition number. A common zone is armed only when all the partitions that it belongs to are armed. It is disarmed the moment one of the partitions it belongs to is disarmed.
2.1.1.1.4	**Copy Zone**	A menu option that copies the settings for an individual zone to a contiguous set of other zones.
2.1.2	**Swinger Count**	A zone characteristic that includes the selected zone in the swinger counter for an partition. Each partition has a swinger counter, and every zone trip in that partition increments the swinger count for that partition. When the count reaches the programmed number of trips, the panel bypasses the last tripped zone and clears the counter. An *Inputs* menu entry that contains the swinger count.
2.1.3	**Zone Types**	A menu entry that groups zone type characteristics and allows the installer to select a pre-defined zone type. There are 30 pre-defined zone types. The characteristics of each zone can be changed. For example, if a keypad beeps, if the zone is a delay 1 or delay 2 zone, a 24-hour zone and so on.
2.1.3.1.1	**Input Type**	A menu entry that groups options that determine the basic features of the selected zone type.
2.1.3.1.1.1	**Fire**	A zone type that reports a fire alarm when activated.
2.1.3.1.1.2	**24-hour**	A zone type where reaction is not dependent on the arm/disarm state of the system. It is permanently active 24 hours a day unless bypassed by forced arming. An example of a 24-hour zone is a fire, panic or glassbreak zone.
2.1.3.1.1.3	**Keyswitch**	A zone type that can be used to arm or disarm a partition using a switch connected to a zone instead of a code. Both pulsed and maintained keyswitches can be used.
2.1.3.1.1.4	**Delay 1**	A zone type whose events can be delayed for a specified interval before a zone creates an alarm. This type of zone is usually used to allow exit and entry to a building. The time intervals for a Delay 1 zone are defined in Entry 1 and Exit 1.
2.1.3.1.1.5	**Delay 2**	A zone type whose events can be delayed for a specified interval before a zone creates an alarm. This type of zone is usually used to allow exit and entry to a building. The time intervals for a Delay 2 zone are defined in Entry 2 and Exit 2.
2.1.3.1.1.6	**Interior**	A zone type that is automatically bypassed when the system is armed in stay mode.

Location	Term	Definition
2.1.3.1.1.7	**Entry Guard**	A zone type that reduces false alarms. If an armed entry guard zone is opened, the keypad sounder activates and the entry delay starts before creating an alarm. This can be programmed as a zone type.
2.1.3.1.1.8	**Cross Zone**	A zone type that requires two or more trips within a specified time before it will report an alarm.
2.1.3.1.1.9	**Trouble**	A zone type that sends an alarm when the system is armed and trouble when the system is disarmed.
2.1.3.1.1.10	**Follower/Access**	A zone type that follows a state of the entry/exit zone. Usually it is a delayed zone when the system is open, and an instant burglary zone during non-entry times This option allows to toggle the follower setting. This option is visible only if the *24-hour* input type option is disabled.
2.1.3.1.2	**Zone Type Name**	A menu option that specifies the name of a particular zone type. This option also allows the name to be edited.
2.1.3.1.3	**Attributes**	A menu entry that groups the additional characteristics of the selected zone type.
2.1.3.1.3.1	**End of Line Resistor**	A zone characteristic that specifies that two 3k3 end of line resistors are used. An end of line resistor (EOL) is a resistor that is placed on the line to stop the signal being bounced back.
2.1.3.1.3.2	**Defeat EOL Resistor**	A menu option that disables the end of line resistor of the specified zone type.
2.1.3.1.3.3	**Loop Response**	A zone characteristic of on-board control panel zones that specifies the response rate. This can be either 500 ms or 50 ms.
2.1.3.1.3.4	**Swinger Zone**	A zone characteristic that allows the selected zone to be automatically bypassed after a specified number of alarms.
2.1.3.1.3.5	**Bypassable**	A zone characteristic that allows the zone to be bypassed.
2.1.3.1.3.6	**Force Armable**	A zone characteristic that allows the zone to be force armed.
2.1.3.1.3.7	**Group Bypass**	A zone characteristic that allows the user to bypass multiple zones with a single operation.
2.1.3.1.3.8	**Zone Activity Monitor**	A zone characteristic that sends a report to the central station when the zone does not change conditions within a specified time period.
2.1.3.1.3.9	**Access Control**	A zone characteristic that enables the zone to act as an access entry point (door shunt). Do not enable this setting unless the system is configured with a door control.
2.1.3.1.3.10	**Pulsed Keyswitch**	A zone characteristic that allows a zone input to be used with a momentary keyswitch. Each activation of the keyswitch toggles the armed state of the control. This

Location	Term	Definition
		option is visible only if the *Keyswitch* input type option is enabled.
2.1.3.1.3.11	**Req. To Exit**	A zone characteristic that enables the zone to act as a request to exit input.
2.1.3.1.3.12	**Holdup**	A zone characteristic that enables the zone to act as a holdup zone. The holdup zone can be activated by a switch, a push button, or a panic button on a keyfob assigned to the holdup zone type. Holdup is a silent alarm with reported HA SIA code. See Appendix 7 for more information.
2.1.3.1.4	**Sound**	A menu entry that groups sounder characteristics for a particular zone type. These characteristics determine the sounds produced by the sirens and keypads when the selected zone is activated.
2.1.3.1.4.1	**Yelping Siren (Burglary)**	A menu option that sounds a burglary siren when a zone is activated.
2.1.3.1.4.2	**Steady Siren (Fire)**	A menu option that sets whether a zone type activates a fire or a burglary siren.
2.1.3.1.4.3	**Audible Keypad**	A menu option that activates the keypad buzzer when an alarm occurs.
2.1.3.1.4.4	**Chime**	A menu option that sets whether a zone type activates a chime. A chime is generally a single stroke signal and is often used as an indication on a shop door. This can be set as a zone type. There is a beep on chime activation and no beep on deactivation.
2.1.3.1.5	**Reporting**	A menu entry that groups reporting options for the selected zone type.
2.1.3.1.5.1	**Local Only**	A zone characteristic that causes that zone not to report alarms to the central station. Locally, the sirens are activated according to the other zone type characteristics. This option is visible only if the *Keyswitch* input type option is disabled.
2.1.3.1.5.2	**Restore Reporting**	A menu option that causes restore events to be reported to the central station.
2.1.3.1.5.3	**Dialer Delay**	A menu option that sets the length of time (in seconds) the dialer waits before reporting an abortable alarm. If the system is disarmed during this time, the abortable alarm is not sent to the central station. The delay can be from 0-255 seconds. A value of 0 means that there is no abort delay.

Location	Term	Definition
2.1.3.1.5.4	**Listen-in**	A menu option that sends a report to the central station indicating that a listen-in session must be started. In order to use listen-in, a NX-534E listen-in module must be installed and a microphone must be connected. When an alarm is generated and reported, the central station can listen to what is happening on the premises. Certain protocols (such as SIA, Contact ID and 200Bd FSK) have 'listen-in blocks' that are communicated with the alarm code and indicate that a listen-in session must be started.
2.1.3.1.6	**Copy Zone Type**	A menu option that copies the settings for a zone type to a new zone type.
2.2	**Outputs**	A menu entry that groups options relating to programmable outputs.
2.2.1	**Prog Outputs**	A menu entry that groups options that configure outputs.
2.2.1.1.1	**Event**	Any occurrence such as system arming, faults and alarms. A menu option that specifies which event activates an output.
2.2.1.1.1.1	**Alarms**	A menu option that groups together the alarm events that can be selected to trigger an output.
2.2.1.1.1.2	**Arm/Disarm**	A menu option that groups the events that can be used to trigger outputs. The entry is available to make selection of output events more convenient.
2.2.1.1.1.3	**Communications**	A menu option that groups together the communication events that can be selected to trigger an output.
2.2.1.1.1.4	**Keypads**	A menu option that groups the keypad events that trigger an output.
2.2.1.1.1.5	**Sirens**	A menu option that groups together the siren events that can be selected to trigger an output.
2.2.1.1.1.6	**Tamper/Fault**	A menu option that groups together the tamper and trouble events that can be selected to trigger an output.
2.2.1.1.1.7	**Tests**	An *Outputs* menu option that groups together the test events that can be selected to trigger an output.
2.2.1.1.2	**Time Unit**	A menu option that specifies whether the outputs are timed in minutes or seconds.
2.2.1.1.3	**Time**	A menu option that sets the length of time for which an output is activated. If it is set to 0, the output follows the event.

Location	Term	Definition
2.2.1.1.4	**Partitions**	A menu entry that lists the partitions assigned to the selected output. The selected output can be triggered by an event on these partitions. A zone may reside in any combination of partitions. A zone that resides in more than one partition becomes a common zone and is reported to its lowest partition number. A common zone is armed only when all the partitions that it belongs to are armed. It is disarmed the moment one of the partitions it belongs to is disarmed.
2.2.1.1.5	**Attributes**	A menu entry that groups the programmable attributes of the selected output.
2.2.1.1.5.1	**Latched**	A menu option that causes an output to remain activated until a code is entered at the keypad.
2.2.1.1.5.2	**Code Stops Timer**	A menu entry that allows the timer used on programmable outputs to be reset by entering a valid user code.
2.2.1.1.5.3	**Only if Closed**	A menu option that activates an output after closing time and before opening time. During these times, codes can be used to arm/disarm the system. A timer is used to set these times.
2.2.1.1.5.4	**Only if Open**	A menu option that activates an output between opening time and closing time.
2.2.1.1.5.5	**Inverted**	A menu option that enables a mode that inverts the state of an output (normally activated and then deactivated when an event occurs).
2.2.2	**Internal Siren**	A menu entry that groups options that set the conditions/events that activate the internal siren. This is a siren which sounds within the building.
2.2.2.1	**Sounds On**	A menu entry that groups events that activate the internal siren.
2.2.2.1.1	**Phone Line Cut**	A menu entry that groups options that activate the internal siren when a phone line cut event occurs.
2.2.2.1.1.1	**When Armed**	A menu option that activates the internal siren if a phone line cut event occurs while the system is armed.
2.2.2.1.1.2	**When Disarmed**	A menu option that activates the internal siren if a phone line cut event occurs while the system is disarmed.
2.2.2.1.2	**Tampers**	A menu option that activates the internal siren when a tamper occurs.
2.2.2.1.3	**Expander Trouble**	A menu option that activates the internal sound when an expander trouble condition occurs.
2.2.2.1.4	**Cross Zone Verification**	A menu option that activates the internal siren during a cross zone verification time.
2.2.2.2	**Short Blast On**	A menu entry that groups internal sounder options. Each option specifies a time at which the sounder blasts. These options are: *Arming*, *Exit Delay Expired*, *Closing Kissoff* and *Keyswitch Arming*.

Location	Term	Definition
2.2.2.2.1	**Arming**	A menu option that causes the internal sounder to blast when the system arms.
2.2.2.2.2	**Exit Delay Expired**	A menu option that causes the internal sounder to blast when the exit time expires.
2.2.2.2.3	**Closing Kissoff**	A menu option that causes the internal sounder to blast when the central station receives a closing report.
2.2.2.2.4	**Keyswitch Arming**	A menu option that causes the internal sounder to blast when the system is armed by keyswitch or armed and disarmed by keyswitch. There is one blast for arming and two blasts for disarming.
2.2.2.3	**Output Signal Type**	A menu option that converts the internal siren to accept a speaker. The built-in 112db siren driver can be converted to a 1-amp voltage output. The siren can be 15 or 30 Watt maximum, with an impedance of 4, 8 or 16 ohms.
2.2.3	**Keypads**	A menu option that groups keypad buzzer options.
2.2.3.1	**Sound On**	A menu entry that groups events that activate the keypad buzzer.
2.2.3.1.1	**Phone Line Cut**	A menu entry that groups options that activate the keypad buzzer when a phone line cut event occurs.
2.2.3.1.1.1	**When Armed**	A menu option that activates the keypad buzzer if a phone line cut event occurs while the system is armed.
2.2.3.1.1.2	**When Disarmed**	A menu option that activates the keypad buzzer if a phone line cut event occurs while the system is disarmed.
2.2.3.1.2	**Mains Failure**	A menu option that activates the keypad buzzer when the mains power supply fails.
2.2.3.1.3	**Low Battery**	A menu option that activates the keypad buzzer when a low battery event occurs.
2.2.3.1.4	**Cross Zone Verification**	A menu option that activates the keypad buzzer during a cross zone verification time.
2.2.3.1.5	**Tampers**	A menu option that activates the keypad buzzer when a tamper occurs.
2.2.3.1.6	**Expander Trouble**	A menu option that activates the keypad buzzer when an expander trouble condition occurs.
2.2.3.1.7	**Emergency Keys**	A menu option that activates the keypad buzzer for emergency keys.
2.3	**Codes**	A menu entry that groups user code options.
2.3.1	**4/6 Digit Codes**	A menu option that specifies whether a four or six digit code is used.
2.3.2	**Installer Code**	A four or six-digit code used to program the system. It specifies the partitions and parts of the system the installer can access. It can also be used as a standard arm/disarm code, in which case it becomes user 255.

Location	Term	Definition
		A *Codes* menu entry that groups installer code options.
2.3.2.1	**Code**	A menu option that sets the user code. This is a series of four or six numbers that allows access to the system.
2.3.2.2	**Authority**	A menu entry that groups access options. These options specify the level of access an individual has when using the control panel.
2.3.2.2.1	**Arm Only After Closing**	A menu option that specifies a code that arms the system during the close window only (when the system is scheduled to be armed). If entered during the open window when the system is turned off, the code does not arm the system.
2.3.2.2.2	**Arm Only**	A menu option that specifies a code that arms the system and does not perform any other function. For example, the code issued to service staff.
2.3.2.2.3	**Arm/Disarm**	A menu option that specifies a four-digit or six-digit code that arms or disarms the system depending on its current status.
2.3.2.2.4	**Master Code**	A menu option that specifies a code that can program other user codes provided it has access to the same partitions as the user code. The user 1 code is the default master code.
2.3.2.2.5	**Bypass Zones**	A menu option that allows the selected code to bypass zones.
2.3.2.2.6	**Reports Open/Close**	A menu option that specifies a code that reports arms (close) and disarms (open) to the central station.
2.3.2.3	**Partitions**	A *Codes* menu entry that lists the partitions assigned to the selected code. The selected code can trigger an event on these partitions.
2.3.3	**Duress Code**	A menu option that sets the duress code. A duress code disarms the system and activates a duress alarm. This is a silent alarm that sends a special report to the central station.
2.3.4	**GuardCodes 16 17**	A menu option that sets the codes 16 and 17 as guard codes. In this case, user codes 16 and 17 cannot be programmed or changed anymore via a master code. They can only be changed via the up/download software. Guard code 16 will be able to arm/disarm at any time. Guard code 17 will only be able to arm/disarm during an alarm condition. Only when an alarm condition occurs, guard code 17 will be able to disarm the system. After having evaluated the alarm condition, guard code 17 can arm the system again but will not be able to disarm anymore (see also location 41, segment 1, option 7).

Location	Term	Definition
2.3.5	**User Auth for Progrm.**	A menu option specifying that user authorisation is required in order to enter program mode.
2.4	**Communications**	A menu entry that groups options for communication between the control panel and the up/download software or central stations.
2.4.1	**Central Station**	A menu entry that groups options relating to the central station. This is a remote location that is designed to monitor signals and reports from alarm systems and summon assistance if necessary. This is also known as a control station or ARC.
2.4.1.1	**Phone Numbers**	A menu entry that groups phone number reporting options.
2.4.1.1.1	**Phone Number**	A menu option that sets the phone number to which events are reported. The control panel can report to up to three phone numbers.
2.4.1.1.2	**Account Code**	A menu option that specifies the unique code sent from the modem in the control panel to the selected phone number. This code is used to identify and charge the user. Separate account codes can be set up for each phone number and each partition. This is also known as the account number. The letters B, C, D, E and F can be included in control panel account codes.
2.4.1.1.3	**Protocol**	A menu option that sets the communicator format used to transmit to the receiver connected to a phone. Up to three phones can be set up. Multiple formats are available, such as Contact ID, SIA, 4+2 and pager format. Contact ID and SIA are the recommended formats. Consult the instructions for your central station receiver to determine which format is compatible.
2.4.1.1.4	**Dial Attempts**	A menu option that specifies the number of dial attempts (1 to 15 attempts) that the communicator makes when reporting to the central station.
2.4.1.1.5	**Backup Control**	A menu option that specifies the way backup call attempts are handled for the particular phone. The exact behaviour depends on the phone this setting is programmed for. For example, programming a “0” will cause the control panel to make the designated number of call attempts to the first backup phone before setting the “Fail To Communicate” condition and stop reporting. Programming a “1” will cause the control panel to stop trying to communicate after the designated number of attempts have been made to the currently programmed phone. If a “2” is programmed in this segment, it will cause the control panel to make the dial attempts in increments of two. The first two attempts will be made to the current phone, the next two attempts to the backup phone, then repeating until the total number of attempts designated in “Dial Attempts” is completed.
2.4.1.1.6	**Events**	A menu entry that groups settings that control which events are reported for phone communication.
2.4.1.1.6.1	**Arm/Disarm/Alarm**	A menu entry that groups the events that are reported to

Location	Term	Definition
		the selected phone number.
2.4.1.1.1.6.1.1	**Alarms**	A menu option that sends a report to the selected phone number when an alarm occurs.
2.4.1.1.1.6.1.2	**Alarm Restores**	A menu option that sends a report to the selected phone number when the alarm has been restored after an alarm.
2.4.1.1.1.6.1.3	**Opening/Closing**	A menu option that sends a report to the selected phone number stating when the system is opened (disarmed) and closed (armed).
2.4.1.1.1.6.1.4	**Zone Bypass and Restores**	A menu option that sends a report to the selected phone number when a zone is bypassed. A report is also sent when the zone is restored (un-bypassed).
2.4.1.1.1.6.2	**Tamper/Fault**	A menu entry that groups together the tamper and fault events that are reported to the selected phone number.
2.4.1.1.1.6.2.1	**Tampers**	A menu option that sends a report to the selected phone number when a tamper occurs.
2.4.1.1.1.6.2.2	**Tamper Restores**	A report is sent when the previous tamper is no longer active.
2.4.1.1.1.6.2.3	**Zone Trouble and Restores**	A menu option that sends a report to the selected phone number when a zone fault condition occurs. A report is also sent when the fault condition is no longer active.
2.4.1.1.1.6.2.4	**Expander Trouble and Restores**	A menu option that sends an expander fault and restore report to the selected phone number.
2.4.1.1.1.6.2.5	**Siren/Line Cut and Restores**	A menu option that sends a report to the selected phone number when a siren or phone line fault occurs. A restore report is sent when the fault is fixed.
2.4.1.1.1.6.2.6	**RF Sensor Lost and Restores**	A menu option that sends a report to the selected phone number when an RF sensor is missing. A restore report is sent to the central station when the receiver receives a valid signal from the lost transmitter.
2.4.1.1.1.6.2.7	**RF Low Battery and Restores**	A menu option that sends a report to the selected phone number when a low battery condition occurs in an RF sensor. A restore report is also sent when the low battery condition is no longer active.
2.4.1.1.1.6.3	**Power**	A menu entry that groups the power events that are reported to the selected phone number.
2.4.1.1.1.6.3.1	**Power Trouble and Restores**	A menu option menu option that reports mains failure, mains restore, low battery and low battery restore events to the selected phone number.
2.4.1.1.1.6.3.2	**Aux Short Circuit and Restores**	A menu option that sends a report to the selected phone number when short circuit is detected. A restore report is also sent when the short circuit condition is fixed.

Location	Term	Definition
2.4.1.1.1.6.4	**Communications**	A menu entry that groups together the communication events that are reported to the selected phone number.
2.4.1.1.1.6.4.1	**Fail to Communicate**	A menu option that reports a fail to communicate event to the selected phone number.
2.4.1.1.1.6.4.2	**Test Reports**	A menu option that sends a test report to the selected phone number at pre-programmed intervals. The units can be set in days or hours.
2.4.1.1.1.6.5.1	**Program/Download**	A menu option that reports programming and up/download events to the selected phone number.
2.4.1.1.1.7	**Partitions to Report**	A menu option that specifies which partitions are reported to the selected phone number. **Important:** When you select a partition, ALL events from this partition are reported to the assigned central station, and individual event settings selected in the Events section are disregarded. If you want to select individual events to be reported to the particular phone number, do not set any partitions in this location.
2.4.1.2	**Partition Account Codes**	A menu option that lists the account codes for each partition. The account code is sent when the relevant partition is reported.
2.4.1.3	**Dialer Auto Cancel/Abort**	A menu option that makes the Cancel and/or Abort features of a dialer automatic when the system is disarmed. It means that pressing the Cancel button (programmable function button) is not required after a disarm code is entered. The Cancel and Abort features must be enabled to permit this Auto feature to work. For proper operation of these features, "Dialer Abort Delay" must be enabled in the zone configuration group.
2.4.2	**Up/Download**	A menu entry that groups options used to control download sessions between the up/download software and the control panel.
2.4.2.1	**Callback Phone Number**	A menu option that specifies the telephone number that the control panel dials if the *Callback Required* option is enabled.
2.4.2.2	**Download Access Code**	A menu option that specifies the eight-digit access code sent by the up/download software to the control panel. The panel permits downloading to occur when it receives this code.
2.4.2.3	**Call Back Reqd**	A menu option that controls access of the up/download software to the control panel. When the software calls the control panel, the panel answers the call and then hangs up. After approximately 36 seconds, the panel calls the software back.
2.4.2.4	**Rings to Answer**	A menu option that sets the number of rings that must occur before the panel answers to start a download session. If the value is 0, the panel will never pick up the phone line.

Location	Term	Definition
2.4.2.5	**Answer Machine Defeat**	A menu entry used to defeat an answering machine. If two-call Answer Machine Defeat AMD is enabled, two telephone calls are required to defeat the answering machine. On the first call, the phone rings once or twice. The control panel detects the rings and starts a 45-second timer. During this timer, the control panel answers the next call on the first ring. This is not recommended for commercial applications.
2.4.2.6	**Call PC on Autotest**	A menu option that allows the panel to use call back when the central station performs an autotest. After the test report is delivered to the central station, the panel calls the up/download software using the call back phone number. Actions, such as upload event log and download phone numbers, can be selected in the up/download software.
2.4.2.7	**Require Code for Download**	A menu option that requires a user code to be entered before downloading can start.
2.4.2.8	**Lockout**	A menu entry that groups options that lock certain system functions.
2.4.2.8.1	**System Shutdown**	A menu option that allows the up/download software to shutdown the control panel. This option can be set only from the up/download software. The shutdown LCD message is shown to explain the reason for the shutdown. During shutdown the system is completely inactive. It is not possible to arm/disarm the system and no reports or sirens are activated.
2.4.2.8.2	**Local Programming**	A *Communications* menu option that disables the installer menu. This option can be set only through the up/download software.
2.3.2.8.3	**Comms Settings**	A menu option that prevents the installer changing the communication settings (telephone numbers, account codes and so on). This option must be set using the up/download software.
2.4.2.8.4	**Download Settings**	A menu option that prevents the installer changing the following download settings: Answer Machine Defeat Callback Required Lockout>System Shutdown Lockout>Local Programming Lockout>Comms Settings Lockout>Download Settings Call PC on Autotest This option must be set through the up/download software.
2.4.3	**Autotest**	A menu entry that groups options that configure the automatic test run by the system.
2.4.3.1	**Hours/Days?**	A menu option that specifies whether the autotest occurs after a specified number of days or hours. The autotest can be suppressed if another report has been sent.
2.4.3.2	**Interval**	A menu option that sets the length of time between autotests. The basic unit is set in the Hours/Days? option. The *Hour* and *Minute* options set the time at which the test

Location	Term	Definition
		is performed.
2.4.3.5	**Time Since Test**	A menu option that sets the length of time since the last autotest. It controls when the next autotest report is sent to the central station.
2.4.4	**Reporting**	A menu entry that groups reporting options.
2.4.4.1	**Partition Reports**	A menu option that specifies the events that are enabled for each partition. Events specified in this option are related to all partitions in the system.
2.4.4.1.1	**Opening/Closing**	A menu option that enables opening/closings reporting.
2.4.4.1.2	**Zone Bypass**	A menu option that that sends a report to the central station when zones are bypassed.
2.4.4.1.3	**Zone Restore**	A menu option that sends a report to the central station when zones are restored.
2.4.4.1.4	**Zone Trouble**	A menu option that sends a report to the central station when a zone fault condition occurs.
2.4.4.1.5	**Zone Tamper**	A menu option that sends a report to the central station when a zone tamper occurs.
2.4.4.1.6	**Cancel**	A menu option that enables cancel reporting. A cancel report is sent to the central station when the system is disarmed (within the time specified by the dialer delay) after an alarm.
2.4.4.1.7	**Recent Closing**	A menu option that sends a report to the central station if an alarm occurs within five minutes after the panel has been armed. The user number that armed the system is also sent.
2.4.4.1.8	**Exit Error**	A menu option that specifies that the control panel sends an exit error report if an entry/exit zone is faulted when the exit delay expires. This report is sent along with the user number that armed the system, if the panel is not disarmed before the entry delay expires. The alarm report is also sent. Even if this feature is not enabled, the siren sounds if any entry/exit zone is faulted when the exit delay expires.
2.4.4.2	**System Reports**	A menu entry that groups options relating to system reports.
2.4.4.2.1	**Tamper/Fault**	A menu entry that groups together the tamper and fault events that are reported to the central station.
2.4.4.2.1.1	**Box Tamper**	A menu option that enables the box tamper switch on the control panel. The control panel has an input for a normally closed tamper switch. When opened, a box tamper is reported as an event.
2.4.4.2.1.2	**Expander Trouble**	A menu option that sends a report to the central station when an expander fault condition occurs.
2.4.4.2.1.3	**Siren Supervision**	A menu option that monitors the siren to detect cut wires. If the wires are cut, the control panel sends a report to the central station.

Location	Term	Definition
2.4.4.2.1.4	**RF Sensor Lost**	A menu option that sends a report to the central station, when an RF sensor is missing. RF sensors send out supervision signals every 15 or 64 minutes, depending on the frequency. An RF receiver must receive these signals within a specified time window. This window is set by the Supervision timer. If the RF receiver does not receive these signals during the time window, the RF sensor is considered missing.
2.4.4.2.1.5	**RF Low Battery**	A menu option that sends a report to the central station when a low battery condition occurs in an RF sensor.
2.4.4.2.1.6	**CleanMe**	A menu option that sends a report to the central station when a smoke detector is dirty.
2.4.4.2.2	**Power**	A menu entry that groups the power events that are reported to the central station.
2.4.4.2.2.1	**Mains Failure**	A menu option that sends a report to the central station when the mains power supply fails. A delay time can be set for this report.
2.4.4.2.2.2	**Low Battery**	A menu option that enables low battery reporting on the control panel.
2.4.4.2.2.3	**Aux Overcurrent**	A menu option that enables overcurrent reporting. A report is sent to the selected central station when too much current is drawn from a device powered by the system.
2.4.4.2.3	**Communications**	A menu entry that groups together the communication events that are reported to the central station.
2.4.4.2.3.1	**Phone Line Cut**	A menu option that sends a report is sent to the central station the moment the phone line cut is restored.
2.4.4.2.3.2	**Fail to Communicate**	A menu option that sends a report to the central station when the system has failed to communicate with the central station after the number of attempts set in Dial Attempts. The report is sent when communication with the central station has been restored.
2.4.4.2.3.3	**Autotest**	A menu option that enables reporting of autotest events to the central station at a specified interval.
2.4.4.2.3.4	**Autotest only when Armed**	A menu option that allows test calls to be made only when the system is armed.
2.4.4.2.4.1	**Log Full**	A menu option that sends a report to the central station when the event log is full.
2.4.4.2.4.2	**Start/End Programming**	A menu option that causes reports to be sent to a specified phone number. A report is sent when local programming begins and ends.
2.4.4.2.4.3	**End Download**	A menu option that sends a report to the central station when downloading from the up/download software to the control panel is complete.
2.4.4.2.5	**Bypass on Force Arm**	A menu option that enables bypass reporting when a zone is force armed.

Location	Term	Definition
2.4.4.2.6	**First to Open/Last to Close**	A menu option that sends a report to the central station stating when the system opened and closed. This option can only be used in a multi-partitioned system. A report is sent stating the first partition opened. A log is then kept recording when the other partitions opened and when they closed. This information is sent in a second report when the last open partition closes.
2.4.4.3	**Report Codes**	A menu option that groups codes that are sent to the central station when a particular event occurs.
2.4.4.3.1	**Zone Types**	A menu entry that groups all reporting codes for the selected zone type.
2.4.4.3.1.1.1	**Event Code**	A menu option that sets the event code reported for the selected zone type.
2.4.4.3.1.1.2	**SIA Code**	A menu option that sets the SIA code reported for the selected zone type.
2.4.4.3.1.1.3	**CID Code**	A menu option that specifies the Contact ID code to be used when reporting the selected zone type.
2.4.4.3.2	**Partition Reports**	A menu entry that groups all reporting for particular partitions.
2.4.4.3.2.1.1	**Restore**	A menu option that groups the report codes sent to the central station when the system is restored.
2.4.4.3.2.1.2	**Bypass**	A menu option that groups the report codes sent to the central station when the partition is bypassed.
2.4.4.3.2.1.3	**Tamper**	A menu option that groups the report codes sent to the central station when a tamper event occurs.
2.4.4.3.2.1.4	**Trouble**	A menu entry that groups the report codes sent to the central station when a trouble event occurs.
2.4.4.3.2.1.5	**Sensor Low Battery**	A menu entry that groups the report codes sent to the central station if a low battery condition is reported for a sensor in the particular partition.
2.4.4.3.2.1.6	**Sensor Lost**	A menu entry that groups the report codes sent to the central station when a sensor lost event occurs in the particular partition.
2.4.4.3.2.1.7	**Opening**	A menu entry that groups the codes reported on an opening (disarm) event for the particular partition.
2.4.4.3.2.1.8	**Closing**	A menu entry that groups the report codes sent to the central station when the particular partition is being closed (armed).
2.4.4.3.3	**Keypad**	A menu entry that groups the report codes sent to the central station for keypad related events.
2.4.4.3.3.1	**Duress Code**	A menu entry that groups the report codes sent for a duress event. A duress situation is one in which a user is being

Location	Term	Definition
		threatened and forced to disarm the system. A duress code is entered to disarm the system as normal and a duress alarm is activated.
2.4.4.3.3.2	**Keypad Aux 1 (Fire)**	A menu entry that groups the report codes sent for the keypad aux 1 (fire) event.
2.4.4.3.3.3	**Keypad Aux 2 (Medical)**	A menu entry that groups the report codes sent for the keypad aux 2 (medical) event.
2.4.4.3.3.4	**Keypad Panic**	A menu entry that groups the report codes sent for the keypad panic event.
2.4.4.3.3.5	**Keypad Tamper**	A menu entry that groups the report codes sent for the keypad tamper event.
2.4.4.3.4	**Power**	A menu entry that groups report codes sent to the central station when power related events occur.
2.4.4.3.4.1	**Mains Failure**	A menu entry that groups the codes used to report a mains failure event.
2.4.4.3.4.2	**Low Battery**	A menu entry that groups report codes sent to the central station for a low battery event. A restore report is sent to the central station when this condition is no longer active.
2.4.4.3.4.3	**Aux Overcurrent**	A menu entry that groups the report codes sent to the central station when an overcurrent event occurs.
2.4.4.3.5	**Tamper/Fault**	A menu entry that groups together the codes used to report tamper and fault events to the central station.
2.4.4.3.5.1	**Box Tamper**	A menu entry that groups the report codes sent to the central station when a box tamper event occurs.
2.4.4.3.5.2	**Siren Tamper**	A menu entry that groups report codes sent to the central station when a siren tamper has occurred.
2.4.4.3.5.3	**Zone Fault**	A menu entry that groups report codes that are sent to the central station when a zone fault condition occurs.
2.4.4.3.5.4	**Siren Tamper**	A menu entry that groups report codes sent to the central station when a siren tamper has occurred.
2.4.4.3.5.5	**Phone Line Cut**	A menu entry that groups the report codes sent when a phone line is cut.
2.4.4.3.5.6	**Expander Fault**	A menu entry that groups report codes sent to the central station when an expander fault event occurs.
2.4.4.3.5.7	**Fail to Communicate**	A menu entry that groups the report codes sent to the central station when a fail to communicate event occurs.
2.4.4.3.6	**Miscellaneous**	A menu entry that groups together the codes used to report selected other events to the central station.
2.4.4.3.6.1	**Log Full**	A menu entry that groups the report codes sent to the central station when the event log is full.
2.4.4.3.6.2	**Autotest**	A menu entry that groups the report codes sent to the central station when an autotest is performed.

Location	Term	Definition
2.4.4.3.6.3	**Cancel**	A menu option that enables cancel reporting. A cancel report is sent to the central station when the system is disarmed (within the time specified by the dialer delay) after an alarm.
2.4.4.3.6.4	**Recent Closing**	A menu option that sends a report to the central station if an alarm occurs within five minutes after the panel has been armed. The user number that armed the system is also sent.
2.4.4.3.6.5	**Start/End Programming**	A menu entry that groups the reporting codes sent to the central station when programming starts, and when the installer leaves programming mode.
2.4.4.3.6.6	**End Download**	A menu entry that groups the report codes sent to the central station when downloading is complete.
2.4.5	**Custom Format**	A menu option that allows you to build communication formats if using a non-standard central station. Consult technical support before using this option and the related options.
2.4.5.1	**Features 1**	A menu option that allows you to configure your own reporting protocol based on the options enabled. Consult technical support before using this option and the related options.
2.4.5.2	**Features 2**	A menu option that allows you to configure your own reporting protocol based on the options enabled. Consult technical support before using this option and the related options.
2.4.5.3	**Inter-Digit Time**	A menu option that sets the inter-digit time for custom pulse format (time between output digits). The inter-digit time is the value programmed on this location, divided by the pulse-rate (PPS) of the programmed format. For example, when the value 10 is programmed here and a pulse format of 20 PPS is used, the inter-digit time is 10/20 = 0.5 sec. Consult technical support before using this option and the related options.
2.5	**Partition Settings**	A menu entry that groups all partition settings. These settings include partition features, partition timers and so on.
2.5.1.1	**Timers**	A menu entry that groups timer options.
2.5.1.1.1	**Entry Time 1**	A menu option that sets the time within which the user must disarm the partition before a full alarm occurs. This time can be between 10 and 255 seconds.
2.5.1.1.2	**Exit Time 1**	A menu option that sets the time within which the user must leave the protected zone after arming the partition before a full alarm occurs. When arming in Away mode, the keypad can beep to warn the user (see keypad menu options), also *System Arming, Leave Now* screen displays until the end of the exit delay time. This time can be between 10 and 255 seconds.

Location	Term	Definition
2.5.1.1.3	**Entry Time 2**	A menu option that sets the time within which the user must disarm the partition before a full alarm occurs. This time can be between 10 and 255 seconds.
2.5.1.1.4	**Exit Time 2**	A menu option that sets the time within which the user must leave the protected zone after arming the partition before a full alarm occurs. When arming in Away mode, the keypad can beep to warn the user (see keypad menu options), also *System Arming, Leave Now* screen displays until the end of the exit delay time. This time can be between 10 and 255 seconds.
2.5.1.2	**Feature Select**	A menu entry that groups all optional features relating to partitions.
2.5.1.2.1	**Arming**	A menu entry that groups the arming characteristics of the selected partition.
2.5.1.2.1.1	**Quick Arm**	A menu option that enables the function keys for part arming and for full arming. These options work on a single-partition keypad only. If the *Quick Arm* menu option is enabled, the user can arm the system by simply pressing the Arm Away, Arm Stay or Night Mode button, otherwise it is necessary to enter the user code first. (To arm a system in the Away mode with a single-partition keypad it is enough to enter the user code).
2.5.1.2.1.2	**Re-exit**	A menu option that enables the exit delay without disarming the partition. The exit delay can be restarted if in arm stay mode by using the Arm Away command in the user menu or by pressing a function key programmed by the installer to activate arm away.
2.5.1.2.1.3	**Silent Auto Arm**	A menu option that arms the partition automatically at a preset time without the keypad buzzer sounding.
2.5.1.2.1.4	**Automatic Instant**	A menu option that enables the automatic instant feature of entry zones. If no exit is detected (the entry/exit zone is not opened and closed) after the partition is armed, the entry delay timer is cancelled, creating an instant zone. If the exit is detected (the user leaves the premises after arming the partition), the entry timer stays active, creating an entry delay.
2.5.1.2.1.5	**Final Set Door**	A menu option applicable for secondary entry/exit zones only (zones with Delay 2 option set). If the final set door option is enabled, the exit time will immediately expire as soon as the secondary entry/exit zone becomes ready again (the door is opened and closed when the user leaves the premises). This feature can only be used in combination with magnetic door contacts.
2.5.1.2.1.6	**Instant Night**	A menu option that enables the instant Night mode selection from the keypad (no toggle). In this mode, the control panel will bypass all zones that have the Entry Guard feature enabled, and the partition will be armed without an exit delay. The partition must be disarmed to cancel this mode.

Location	Term	Definition
2.5.1.2.1.7	**Instant Stay Toggle**	A menu option that enables a toggled setting of the Arm Stay (F4) function key (toggling between Stay and Instant mode for a partition). When this option is enabled, pressing the F4 key once arms the system in the Stay mode. Subsequently pressing the F4 key toggles the armed partition between the Stay mode and the Instant mode. When this option is disabled, toggling with the F4 key does not work, and the F4 key can be used for arming the system in the Stay mode only. **Note**: In the master mode you can toggle only a single partition at the time.
2.5.1.2.1.8	**Arm with Tamper Mem/FTC**	A menu option that allows to arm the partition even if previous tamper alarm indicators and/or Failed To Communicate events have not been cleared from memory.
2.5.1.2.1.9	**Arm with Low Battery**	A menu option that allows to arm the partition even if the Battery Low event has been triggered.
2.5.1.2.1.10	**Keyswitch Arm Stay**	A menu option that allows to arm the partition in Stay mode with a keyswitch.
2.5.1.2.1.11	**Late to Close/Early to Open**	A menu option that sends a report to the central station when the system is armed late or disarmed early. If an opening occurs before the preset opening time, the control panel will send an "Early Open" report. If it fails to close on or before the designated closing time, the control panel will send a "Late to Close" report. You can set up the opening and closing times by setting the respective options in the *Control Panel>Arm Schedules* menu group.
2.5.1.2.1.12	**Auto Arm in Stay Mode**	A menu option that allows to autoarm the partition in Stay mode. You can set up the automatic arming and disarming times by setting the respective options in the *Control Panel>Arm Schedules* menu group.
2.5.1.2.2	**Keypads**	A menu entry that groups keypad options.
2.5.1.2.2.1	**Silent PA**	A menu option that prevents all audible and visual indications when a personal attack alarm occurs.
2.5.1.2.2.2	**Audible PA**	A menu entry that causes the keypad to beep and sounds the internal and external sirens when a PA alarm is activated.
2.5.1.2.2.3	**Fire/Aux 1**	A menu option that activates a key with the Fire Alarm function assigned, for all the keypads in the selected partition (see also *This Keypad>Function Keys* option description). When this option is enabled and the Fire Alarm key is pressed at the keypad, a fire alarm is generated. See *Programming the function keys* on page 154. **Note:** The report codes in slow formats sent for the keypad aux 1 (fire) event are configured with the *Control Panel>Communications>Reporting>Report Codes>Keypad>Keypad Aux 1 (Fire)* menu option.

Location	Term	Definition
2.5.1.2.2.4	**Medical/Aux 2**	A menu option that activates a key with the Medical Alarm function assigned, for all the keypads in the selected partition (see *This Keypad>Function Keys* option description). When this option is enabled and the Medical Alarm key is pressed at the keypad, a medical alarm is generated. See *Programming the function keys* on page 154. **Note:** The report codes in slow formats sent for the keypad aux 2 (medical) event are configured with the *Control Panel>Communications>Reporting>Report Codes>Keypad>Keypad Aux 2 (Medical)* menu option.
2.5.1.2.2.5	**Keypress Tamper**	A menu option that disables the keypad for 60 seconds and sends a tamper signal to the central station if 30 key presses are entered without producing a valid code.
2.5.1.2.2.6	**LED Extinguish**	A menu option that enables or disables hiding status icons on a display for the selected partition. If enabled, the status icons disappear 20 seconds after the last key press (only the power icon stays visible). There are two LED Extinguish options (one for a partition and one for a keypad in *This Keypad* menu), and both must be enabled for this feature to work on a particular keypad in the particular partition. When the user sets the LED Extinguish option for the Control Panel to Enable then he must restart power supply for the control panel. After restarting, this function will be enabled. When the user wants to disable this option he must set it to Disable, and restart the power supply. The system then waits for a valid user code. The LED Extinguish option gets disabled after the user enters the user code (for example, arm the system, accept an alarm, enter the user menu, etc.).
2.5.1.2.3	**Bypass**	To temporarily remove a zone from operation when arming the system. A menu entry that groups bypass options.
2.5.1.2.3.1	**Auto Bypass**	A menu option that automatically bypasses interior follower zones if no exit is detected during the exit delay time. The exit is detected by the opening and closing of an entry/exit zone.
2.5.1.2.3.2	**Code Required**	A menu option that specifies whether a user code is required for bypassing zones.
2.5.1.2.3.3	**Sounder Alert**	A menu option that activates the keypad buzzer when a user arms the system with one or more zones bypassed.
2.5.1.2.3.4	**Bypass Toggle**	A menu option that allows an interior zone be bypassed or included while the system is armed.
2.5.1.2.3.5	**No Forced Bypass**	A menu option that disables auto bypassing of force armable zones. Auto bypassing is enabled when this option is set to No.
2.5.1.2.4.1	**Mains/Batt Sounder Alert**	A menu option that causes the keypad sounder to beep upon arming or disarming if the mains power is missing or a low battery is detected.

Location	Term	Definition
2.5.1.2.4.2	**Tamper if Zone Lost**	A menu option that sends a report to the central station when a wireless zone sensor is lost and activates a tamper alarm. Different reports are sent depending on the system status. When armed the tamper and the lost report are sent. When disarmed only the lost report is sent.
2.6	**System Settings**	A menu entry that groups programmable system features and reporting options.
2.6.1	**Timers**	A menu entry that groups timer options.
2.6.1.1	**Zones**	A menu entry that groups time settings relating to zones.
2.6.1.1.1	**Fire Verification Time**	A menu option that sets the amount of time within which a second trip must occur on a smoke detector in order to generate an alarm.
2.6.1.1.2	**Zone Inact. Unit**	A menu option that allows the zone inactivity option to be configured in hours or days.
2.6.1.1.3	**Zone Activity Monitor**	A menu option that sets the zone inactivity time. It is possible to specify this time in minutes or hours.
2.6.1.1.4	**Cross Zone Timer**	A menu option that sets the cross zone time in minutes. This can be from 0 to 255 minutes, where 0 = no cross zoning.
2.6.1.2	**Power**	A menu entry that groups the timer options relating to power events.
2.6.1.2.1	**Batt Dynamic Test Duration**	A menu option that sets the length of time that the control panel performs the *Dynamic Battery* test. This can be between 0 to 30 minutes where 0 is no test.
2.6.1.2.2	**Mains Report Delay**	A menu option that sets the length of time between detecting a mains failure on the control panel and sending a report to the central station. The restore event is sent four minutes after the mains is restored.
2.6.1.2.3	**Power Up Delay**	A menu option that sets the time between mains restore after a power failure and the system powering up again. This can be set from 0-60 seconds. 0 means no power up delay.
2.6.1.3	**Sounders**	A menu entry that groups timers for the internal siren, external siren and chime duration on the keypad.
2.6.1.3.1	**Internal Siren Timeout**	A menu option that sets the length of time the internal siren rings before automatically cutting out. This time can be between 0 and 255 minutes. When set to 0, the siren is active until a valid code is entered on the keypad.
2.6.1.3.2	**Chime Time**	A menu option that sets the length of time that the chime operates. This time can be set in 50 ms (1/20th second) increments from 0-12 seconds. 0 = follows zone.
2.6.1.4	**Communications**	A menu option that groups timers for communication events.

Location	Term	Definition
2.6.1.4.1	**Dialer Abort Delay**	A menu option that creates a delay, programmed in seconds, in reporting an alarm to the central station.
2.6.1.4.2	**Listen-in Time**	A menu option that sets the length of time the central station can listen for sounds of intrusion by means of microphones at the alarm site.
2.6.1.4.3	**Phone Line Cut Delay**	A menu option that sets the length of time before a phone line cut is signalled after a phone line cut is detected. A phone line fault is displayed in *Service Check>Reset* when *Phone Line Cut Delay* = 0.
2.6.1.5.1	**Programming Mode Timeout**	A menu option that sets the length of time the control panel can be in programming mode. This time can be between 1 and 255 minutes. When set to 0, the programming mode times out after 15 minutes.
2.6.1.5.2	**Auto Arm Warning Time**	A menu option that sets the length of the warning signal emited during auto arming. This time can be between 1 and 255 minutes, with 1 minute being a default value.
2.6.1.5.3	**Auto Arm Retry Timer**	A menu option that sets the auto arm cycle timer. This time can be between 1 and 255 minutes, with 45 minutes as a default value.
2.6.2	**Feature Select**	A menu entry that groups all optional features relating to control panel system settings.
2.6.2.1	**Inputs**	A menu entry that groups options that enable features relating to inputs.
2.6.2.1.1	**On-board zones**	A menu option that disables the wired zones on the control panel. This provides a completely wireless alarm system.
2.6.2.1.2	**Box Tamper**	A menu option that enables the box tamper switch on the control panel. The NetworX V3 has an input for a normally closed tamper switch. When opened, a box tamper is reported as an event.
2.6.2.1.3	**ExitError limited to EE1**	A menu option that limits the Exit Error to Entry/Exit Delay 1.
2.6.2.1.4	**Double Pulse**	A menu option that will allow two trips on the same cross-zone to activate an alarm.
2.6.2.1.5	**Force Default Zone Types**	A menu option that uses the default zone types in the country defaults for the selected country rather than configured zone types.
2.6.2.1.6	**A+B/Cross Zone**	When this feature is enabled, a first trigger from a zone will send a BG report (unverified alarm or B-alarm) for that zone. The B-alarm message will be written in the log. In addition, a fix 30 minute timer will start. If a zone is triggered for a 2nd time within the 30 minutes time frame, this zone will send a BA report (burglary alarm or verified alarm) to the monitoring station. If there is no 2nd zone that was triggered within 30 minutes, the timer will be cleared. A+B alarm reporting only works with intrusion zone types using the SIA formats. When this feature is enabled, the standard cross-zoning feature will be inactive.

Location	Term	Definition
2.6.2.1.7	**Immediate Zone Restore**	A menu option that sets the way zones are restored. When it is On, the zones restore immediately. In this case all the alarms and restores are sent as they occur even in case of multiple alarms. When this option is Off, the zones restore only when the siren is off or disarmed. In this case a second or subsequent alarm will not be sent until the siren times out.
2.6.2.2	**Diagnostics**	A menu entry that groups test options. These options specify the tests that can be performed on the control panel.
2.6.2.2.1	**Batt Missing Test**	A menu option that enables a test to determine whether the battery is connected to the system. This test is usually performed automatically when the system is first powered up and periodically thereafter.
2.6.2.2.2	**Dynamic Batt Test at Arming**	A menu option that enables a dynamic battery test at arming. This is an automatic test carried out by the control panel at the moment of arming to ensure the battery is working properly. The panel lowers the battery charging voltage in order to draw current from the battery. If the system is not armed between 00:01 and 23:59, the test is performed at 00:00.
2.6.2.2.3	**Manual Siren Test**	A menu option that activates the siren test when the *LCD & Self Test* command is selected from the user menu.
2.6.2.2.4	**Manual Dialer Test**	A menu option that includes a dialer test in the user's manual test. A manual test call is made to the central station and the corresponding signal is transmitted.
2.6.2.3	**Clock**	A menu entry that groups options that configure the clock.
2.6.2.3.1	**Use Int.Crystal for Clock**	A menu option that provides an accurate clock in situations where different mains frequencies are used: 50 Hz or 60 Hz are possible selections.
2.6.2.3.2	**Lost Clock Indication**	A menu option that enables the service message 'Panel Loss of time'.
2.6.2.3.3	**Summer/Winter Time**	A menu option that allows automatic switching of summer and winter time.
2.6.2.4.1	**Steady Siren (Fire)**	A menu option that sets the type of siren activated when a fire alarm occurs. This can be either yelping or temporal.
2.6.2.4.2	**User Code Resets Tamper Memory**	A menu option that allows a user to reset the system after a tamper alarm. If this option is disabled, an installer must reset the system each time a tamper occurs. The user should identify the cause of the alarm before arming the system and contact the installer if necessary.
2.6.2.4.3	**Use GSM If Line Trouble**	A menu option that specifies the backup phone number over GSM. This phone number is used when the on-board dialer fails.
2.6.2.4.4	**First Alarm Logic**	A menu option that enables first alarm logic. This feature affects the way multiple alarms are displayed on a keypad. If this option is enabled and multiple alarms occur during an armed cycle, the keypad will display the first tripped zone only before disarming. After disarming, the first zone tripped

Location	Term	Definition
		will be the one that says "Alarm Memory" with the "Alarm" message flashing. If this option is disabled, all tripped zones will be displayed as well as all bypassed zones.
2.6.2.4.5	**Log Protection**	A menu option that prevents a single, non-zone reportable event to fill up the event memory. The event will only be logged for a maximum of 3 times between closings or code entry.
2.6.2.4.6	**KP Shutdown Mode**	A menu option that causes the keypad to display a "Please Enter Your Code" prompt, power-on icon and "NOT OK to arm" icon only, hiding the system status. **Note:** The keypad can be programmed to display the date and time instead of the "Please Enter Your Code" message. This feature can be enabled or disabled by selecting *Installer menu>This Keypad>Keypad Features>Advanced Options>KP Shutdown shows Clock* menu option.
2.6.2.4.7	**Silent Exit Always**	A menu option that prevents the exit time buzzer activating whenever the system is armed or during the re-exit time. Setting this option also doubles the exit delay (for example, if it is set to 30 seconds it changes to 60 seconds).
2.6.2.4.8	**EN Mode**	A menu option that allows to switch off the EN 50131 Mode. This menu option is displayed only when the EN 50131 Mode is active.
2.7	**Arm Schedules**	A menu entry that groups scheduling options. These options configure the schedules used by the control panel for auto arming.
2.7.1	**Arm Only After Close**	A menu option that specifies the days of the week that each partition is open. On these days, “arm only after closing” codes will be able to arm and disarm during the open window. On days not selected here, “arm only after closing” codes will not disarm.
2.7.2	**Auto Arm**	A menu option that allows the control panel to auto arm at a specified time. At this time, the keypad beeps for 50 seconds before the panel arms. The arming process is stopped if a code is entered on the keypad.
2.7.2.1.8	**45 Minute Retry**	A menu option that causes the panel to try to arm after every 45 minutes of inactivity until the next opening time, or until the system is armed. The 45-minute timer is extended when there is activity in the building. This causes the Ready icon to turn off and on. If closing reports are sent, the user code is 97.
2.7.3	**Auto Disarm**	A menu option that allows the control panel to auto disarm at a specified time.
2.7.4	**Schedule Times**	A menu entry that groups entries related to automatic arming, opening and closing schedules.
2.7.3.1	**Opening**	A menu option that sets the time at which the selected schedule enters the open state. At this time, the control panel enables codes designated as ‘Arm only after closing’.

Location	Term	Definition
2.7.3.2	**Closing/Autoarm**	A menu option that sets the time after which the partitions selected in *Partitions Autoarming* start to arm automatically. Users with arm only after closing rights can arm the partitions selected in *Partitions Opening* only after this time.
2.8	**Reset Settings**	A menu entry that groups entries related to default panel settings.
2.8.1	**Country Code**	A menu option that sets a default country code for the panel.
2.8.2	**Reset Settings**	A menu option that resets all the control panel settings to their factory defaults.
2.8.3	**Switch to EN**	A menu option that switches the panel to the EN 50131-compatible settings. For additional information about the EN 50131 norm, see Appendix 7.

Control panel programming locations

Telephone number 1

LOCATION 0 - PHONE N° 1 (20 segments, numerical data)

The first telephone number is programmed in location 0. A “14” indicates the end of the phone number. Delays of four seconds can be programmed at any point in the phone number by programming a “13” in the appropriate segment. The system will always wait for a dial tone, unless the first digit of the phone number is a “13”; in this case, it will only delay. Tone (DTMF) dialling is default. If you want pulse tone dialling, program a “15” in the segment where pulse dialling should begin. If the entire number should be pulse dialling, program a “15” in the first segment. Program an “11” for a “*”, and a “12” for a “#”.

Note: A zero is programmed as a “0”.

LOCATION 1 - ACCOUNT CODE FOR PHONE N° 1 (6 segments, numerical data)

Location 1 is used to program the account code that is sent when phone N°1 is dialled. A zero in the account code is programmed as a “0”. A “10” indicates the end of the account code, so program a “10” in the segment immediately after the last digit of the account code. If the account code is 6 digits long, program all 6 segments.

LOCATION 2 - COMMUNICATOR FORMAT FOR PHONE N° 1 (1 segment, numerical data)

Location 2 contains the communicator format used to transmit to the receiver that is connected to phone N°1. Consult the instructions for your central station receiver to determine which format is compatible. See Appendix 3 for all available format selections. If you require a format other than those listed, review the override options described in location 18 in order to create the appropriate format. In order to create a special format, a "15" must be programmed in location 2 in addition to the entries in location 18. If this location contains a "0", the built-in communicator will be disabled, and the NetworX V3 will function as a 'local only' control.

LOCATION 3 - DIAL ATTEMPTS/BACKUP CONTROL FOR PHONE N° 1 (2 segm., numerical data)

Segment 1- Dial attempts: Location 3, segment 1 is used to enter the number of dial attempts (1 to 15) which the communicator will make to phone N°1 before it ends the notification process. Factory default is "8" and the communicator will make 8 attempts to the first number.

Note: There will be a waiting time of 12 seconds between the first two dial attempts, and a waiting time of 60 seconds between each subsequent dial attempt.

Segment 2 - Phone N° 1 backup control: Programming a "0" in segment 2 of this location will cause the NetworX V3 to make the designated number of attempts to phone N°2 before setting the "Fail To Communicate" condition and stop reporting. Programming a "1" in this segment will cause the NetworX V3 to stop trying to communicate after the designated number of attempts have been made to phone N°1. If a "2" is programmed in this segment, it will cause the NetworX V3 to make the dial attempts in increments of two. The first two attempts will be made to phone N°1, the next two attempts to phone N°2, then repeating until the total number of attempts designated in Segment 1 is completed.

Reporting events to phone number 1

Phone N°1 has two programming locations that are used to select the events which are reported to this phone number.

Location 4 is used to select which events are reported to phone N°1. Location 5 is used to select which partitions are reported to phone N°1. If you do not want dual or split reporting, use location 4 to select all events to phone N°1, and leave location 5 at the factory default of "0". If you want dual or split reporting, and the split is based on the event type (such as alarm, open/close, etc.), you should use location 4 to select only those events that should be reported to phone N°1, and you should leave location 5 at the factory default of "0". If you want dual or split reporting, and the split is based on partition, you should program location 4 as a "0" and use location 5 to select those partitions that are to be reported to phone N°1. If no events are to be reported to phone N°1, both locations should be programmed as "0".

LOCATION 4 - EVENTS REPORTED TO PHONE N° 1 (2 segments, feature selection data)

Segment 1
1 = Alarms
2 = Opening and closings

3 = Zone bypass and bypass restores
4 = Zone trouble and trouble restores
5 = Power fail (AC failure), low battery, power restore (AC restore) , and low battery bestore
6 = Bell cut, bell cut restore, telephone line restore
7 = Test reports
8 = Start and end programming, download complete and log full

Segment 2
1 = Zone and box tamper
2 = Auxiliary power over-current, and restore
3 = Wireless sensor missing and restore
4 = Wireless sensor low battery and restore
5 = Expander trouble and restore (keypads are considered as expanders)
6 = Fail to communicate
7 = Alarm restore
8 = Tamper restore

LOCATION 5 - PARTITIONS REPORTED TO PHONE N° 1 (1 segment, feature selection data)

Location 5 is used when the events to be reported to a phone number are based on the partition, regardless of the event. If you use this location, you should program location 4 as "0".

Segment 1
1 = Partition 1
2 = Partition 2
3 = Partition 3
4 = Partition 4

Telephone number 2

LOCATION 6 - PROGRAMMING PHONE N° 2 (20 segments, numerical data)

Phone N°2 is programmed in location 6. A "14" indicates the end of the phone number. Delays of four seconds can be programmed at any point in the phone number by programming a "13" in the appropriate segment. The system will always wait for a dial tone unless the first digit of the phone number is a "13"; in this case, it will only delay. Tone (DTMF) dialling is default. If you want pulse tone dialling, program a "15" in the segment where pulse dialling should begin. If the entire number should be pulse dialling, program a "15" in the first segment. Program an "11" for a "*", and a "12" for a "#".

Note: A zero is programmed as a "0".

LOCATION 7 - ACCOUNT CODE FOR PHONE N° 2 (6 segments of numerical data)

Use location 7 to program the account code that is sent when phone N°2 is dialled. A zero in the account code is programmed as a "0". A "10" indicates the end of the account code, so program a "10" in the segment immediately after the last digit of the account code. If the account code is 6

digits long, program all 6 segments. If this location is left unprogrammed, account code 1 will be used when the second phone number is dialled.

LOCATION 8 - COMMUNICATOR FORMAT FOR PHONE N° 2 (1 segment, numerical data)

Location 8 contains the communicator format used to transmit to the receiver that is connected to phone N°2. Consult the instruction manual for your central station receiver in order to determine which format is compatible. See Appendix 3 for all available format selections. If you require a format other than those listed, review the override options described in Location 18 to create the appropriate format. In order to create a special format, a "15" must be programmed in location 8, in addition to the entries in location 18. If this location contains a "0", format 1 will be used when phone N°2 is dialled.

LOCATION 9 - DIAL ATTEMPTS/BACKUP CONTROL FOR PHONE N° 2 (2 segments, numerical data)

Segment 1, dial attempts: Segment 1 of location 9 is used to enter the number of dial attempts (1 to 15 attempts) that the communicator will make to phone N°2 before it ends the notification process. Factory default is "0", and the communicator will make the same number of attempts as those programmed in location 3.

Note: There will be a waiting time of 12 seconds between the first two dial attempts, and a waiting time of 60 seconds between each subsequent dial attempt (regardless of the number dialled).

Segment 2, phone N° 2 backup control: Programming a "0" in segment 2 of this location will cause the NetworX V3 to make the designated number of attempts to phone N°1 before setting the "fail to communicate" condition and stop reporting. Programming a "1" in this segment will cause the NetworX V3 to stop trying to communicate after the designated number of attempts have been made to phone N°2. If a "2" is programmed in this segment, it will cause the NetworX V3 to make the dial attempts in increments of two. The first two attempts will be made to phone N°2, the next two attempts to phone N°1, then repeating until the total number of attempts designated in segment 1 is completed.

Reporting events to phone number 2

Phone N°2 can be used to back up phone N°1, or as a second receiver to multi-report or split-report events. Phone N°2 has two programming locations that are used to select the events that are reported to this phone number. Location 10 is used to select the events which are reported to phone N°2, and location 11 is used to select which partitions are reported to phone N°2. If you do not want dual or split reporting, location 10 and location 11 should be left at the factory default of "0". If you want multi-reporting or split reporting, and the split is based on the event type (such as alarm, open close etc.), location 10 should be used to select only those events that should be reported to phone N°2, and location 11 should be left at the factory default of "0". If you want dual or split reporting, and the split is based on partition, then location 10 should be programmed as "0", and location 11 should be used to select those partitions that are to be reported to phone N°2. If no events are to be reported to phone N°2, both locations should be at "0".

LOCATION 10 - EVENTS REPORTED TO PHONE N° 2 (2 segments of feature selection data)

Segment 1

1 = Alarms
2 = Opening and closings
3 = Zone bypass and bypass restores
4 = Zone trouble and trouble restores
5 = Power fail (AC failure), low battery, power restore (AC restore) , and low battery restore
6 = Bell cut, bell cut restore, telephone line restore
7 = Test reports
8 = Start and end programming, download complete and log full

Segment 2

1 = Zone and box tamper
2 = Auxiliary power overcurrent, and restore
3 = Wireless sensor missing and restore
4 = Wireless sensor low battery and restore
5 = Expander trouble and restore (keypads are considered as expanders)
6 = Fail to communicate
7 = Alarm restore
8 = Tamper restore

LOCATION 11 - PARTITIONS REPORTED TO PHONE N° 2 (1 segment, feature selection data)

Location 11 is used when events to be reported to a phone number are based on the partition, regardless of the event. If this location is used, location 10 should be “0”.

Segment 1

1 = Partition 1
2 = Partition 2
3 = Partition 3
4 = Partition 4

Telephone number 3

LOCATION 12 - PROGRAMMING PHONE N° 3 (20 segments, numerical data)

Phone N°3 is programmed in location 12. A “14” indicates the end of the phone number. Delays of four seconds can be programmed at any point in the phone number by programming a “13” in the appropriate segment. The system will always wait for a dial tone unless the first digit of the phone number is a “13”; in this case, it will only delay. Tone (DTMF) dialling is default. If you want pulse tone dialling, program a “15” in the segment where pulse dialling should begin. If the entire number should be pulse dialling, program a “15” in the first segment. Program an “11” for a “*”, and a “12” for a “#”.

Note: A zero is programmed as a “0”.

LOCATION 13 - ACCOUNT CODE FOR PHONE N° 3 (6 segments, numerical data)

Use location 13 to program the account code that is sent when phone N°3 is dialled. A zero in the account code is programmed as a "0". A "10" indicates the end of the account code, so program a "10" in the segment immediately after the last digit of the account code. If the account code is 6 digits long, program all 6 segments. If location 6 is left un-programmed, account code 1 will be used when phone N°3 is dialled.

LOCATION 14 - COMMUNICATOR FORMAT FOR PHONE N° 3 (1 segment, numerical data)

Location 14 contains the communicator format used to transmit to the receiver that is connected to phone N°3. Consult the instruction manual for your central station receiver in order to determine which format is compatible. See Appendix 3 for all available format selections. If you require a format other than those listed, review the override options described in location 18 to create the appropriate format. In order to create a special format, a "15" must be programmed in location 14, in addition to the entries in location 18. If this location contains a "0", format 1 will be used when phone N°3 is dialled.

LOCATION 15 - DIAL ATTEMPTS/BACKUP CONTROL FOR PHONE N° 3 (2 segments, numerical data)

Segment 1, dial attempts: Segment 1 of location 15 is used to enter the number of dial attempts (1 to 15) that the communicator will make to phone N°3 before it ends the notification process. Factory default is "0", and the communicator will make the same number of attempts as those programmed in location 3.

There will be a waiting time of 12 seconds between the first two dial attempts, and a waiting time of 60 seconds between each subsequent dial attempt (regardless of the number dialled).

Segment 2 - Phone N° 3 backup control: Programming a "0" in segment 2 of this location will cause the NetworX V3 to make the designated number of attempts to phone N°2 before setting the "Fail To Communicate" condition and stop reporting. Programming a "1" in this segment will cause the NetworX V3 to stop trying to communicate after the designated number of attempts have been made to phone N°3. If a "2" is programmed in this segment, it will cause the NetworX V3 to make the dial attempts in increments of two. The first two attempts will be made to phone N°3, the next two attempts to phone N°2, then repeating until the total number of attempts designated in segment 1 is completed.

Reporting events to phone number 3

Phone N°3 can be used as a third receiver to multi-report or split report events. Phone N°3 has two programming locations that are used to select the events that are reported to this phone number. Location 16 is used to select which events are reported to phone N°3, and location 17 is used to select which partitions are reported to phone N°3. If you do not want dual or split reporting, location 16 and location 17 should be left at the factory default of "0". If you want multi-reporting or split reporting, and the split is based on the event type (such as alarm, open/close, etc.), then location 16 should be used to select only those events that should be reported to phone N°3, and location 17 should be left

at the factory default of “0”. If you want dual or split reporting, and the split is based on partition, then location 16 should be programmed to “0” and location 17 should be used to select those partitions that are to be reported to phone N°3. If no events are to be reported to phone N°3, both locations should be at “0”.

LOCATION 16 - EVENTS REPORTED TO PHONE N° 3 (2 segments, feature selection data)

Segment 1

1 = Alarms
2 = Opening and closings
3 = Zone bypass and bypass restores
4 = Zone trouble and trouble restores
5 = Power fail (AC failure), low battery, power restore (AC restore), and low battery restore
6 = Bell cut, bell cut restore, telephone line restore
7 = Test reports
8 = Start and end programming, download complete and log full

Segment 2

1 = Zone and box tamper
2 = Auxiliary power overcurrent, and restore
3 = Wireless sensor missing and restore
4 = Wireless sensor low battery and restore
5 = Expander trouble and restore (keypads are considered as expanders)
6 = Fail to communicate
7 = Alarm restore
8 = Tamper restore

LOCATION 17 - PARTITIONS REPORTED TO PHONE N°3 (1 segment, feature selection data)

Location 17 is used when the events to be reported to a phone number are based on the partition, regardless of the event. If this location is used, location 16 should be “0”.

Segment 1

1 = Partition 1
2 = Partition 2
3 = Partition 3
4 = Partition 4

Special formats

LOCATION 18 - CUSTOM COMMUNICATOR FORMAT (see locations 2, 8, and 14)

Segment 1

1 = On for 1800hz transmit; Off for 1900hz
2 = On for 2300hz handshake; Off for 1400hz
3 = On for checksum parity; Off for double round parity
4 = On for 2 digit event code; Off for 1 digit event code
5 = On for extended reporting; Off for non-extended reporting
6 = Reserved
7 = On for 20 PPS; Off for 10 or 40 PPS
8 = On for 10 PPS; Off for 20 or 40 PPS

Segment 2

1 = On for pager format (no handshake required).
2 = On for 1400/2300 handshake
3 = Reserved
4 = Reserved
5 = On for Contact ID
6 = On for SIA
7 = On for 3 digit event code
8 = On for DTMF

Segment 3 Reserved

Segment 4 Inter-digit time for pulse format:
The inter-digit time is the value programmed on this location, divided by the pulse-rate (PPS) of the programmed format. This is programmed in a binary way: in order to program the value "10", options 2 and 4 must be selected, for value "5", options 1 and 3 must be selected.

Ex: when the value 10 is programmed on segment 4 and a pulse format of 20 PPS is used, the inter-digit time is 10/20 = 0.5 sec.

Download parameters

LOCATION 19 - DOWNLOAD ACCESS CODE (8 segments, numerical data)

Location 19 contains the eight-digit access code that the NetworX V3 must receive from the downloading software before the panel will allow downloading. The factory default code is 84800000.

LOCATION 20 - NUMBER OF RINGS TO ANSWER (1 segment, numerical data)

Location 20 contains the number of rings to answer for a download. Enter a number from "0" (disabled) to "15". Factory default is "8", so the NetworX V3 will answer after 8 rings.

LOCATION 21 - DOWNLOAD CONTROL (1 segment, feature selection data)

Location 21 contains the feature selections to control download sessions. The following features can be enabled or disabled using this location (see the feature definitions on pages 5-11).

Segment 1

1 = On: enables two call answering machine defeat
2 = Reserved
3 = On: requires call-back before download session
4 = Shutdown (can only be viewed from the keypad; must be changed by downloading)
5 = On: locks all local programming. (can only be viewed from the keypad; must be changed by downloading)
6 = On: locks programming of all locations associated with the communicator (can only be viewed from the keypad; must be changed by downloading)

7 = On: locks out download section. (If "On", locations 19-22 cannot be viewed from the keypad; can only be viewed from the keypad when "Off".)
8 = On: enables call-back at auto test interval

LOCATION 22 - DOWNLOAD CALL BACK NUMBER (20 segments, numerical data)

If a telephone number is programmed into this location, and "Require Call-back" is enabled in location 21, the control panel will hang up for approximately 36 seconds (ensuring that the calling party has disconnected), and then call back. The system will always wait for a dial tone unless the first digit of the phone number is a "13"; in this case, it will only delay. Tone (DTMF) dialling is default. If you want pulse tone dialling, program a "15" in the segment where pulse dialling should begin. If the entire number should be pulse dialling, program a "15" in the first segment. Four-second delays can be obtained anywhere in the sequence by programming a "13" in the appropriate delay location.

Note: A zero is programmed as a "0".

Warning: You should always check that the callback phone number is accurate before disconnecting.

Feature and report selections (for partition 1)

LOCATION 23 - PARTITION 1, FEATURE AND REPORT SELECTIONS (5 segments, feature selection data)

Location 23 is used to enable certain features that the user can access or see from the keypad of the system. In addition, certain communicator reports are enabled in location 23. Each of these features can be enabled by partition. For additional partition information, see locations 88-109.

If the feature selection location for any partition is left blank, that partition will use this location for the feature selection. This location contains 5 segments of 8 features each (see the feature definitions).

Segment 1
1 = On: enables the quick arm feature (for exit and stay mode)
2 = On: enables the re-exit feature
3 = On: enables the automatic bypass feature (of interior zones)
4 = On: enables the silent keypad panic feature (overrides the audible panic selection)
5 = On: enables the audible keypad panic feature
6 = On: enables the keypad Aux 1 feature (FIRE)
7 = On: enables the keypad Aux 2 feature (MEDICAL)
8 = On: enables the keypad multiple code attempt tamper feature (keypad lockout)

Segment 2
1 = On: enables the LED extinguish feature
2 = On: enables the require code for bypassing feature
3 = On: enables the zone bypassed sounder alert feature
4 = On: enables the AC power/low battery sounder alert feature
5 = On: enables bypass toggle
6 = On: enables silent auto arm
7 = On: enables the automatic instant feature (of entry/exit zones)
8 = On: enables final set door

Segment 3

1 = On: enables opening and closing reports
2 = On: enables zone bypass reporting
3 = On: enables zone restore reporting
4 = On: enables zone trouble reporting
5 = On: enables zone tamper reporting
6 = On: enables the cancel reporting
7 = On: enables the recent closing report
8 = On: enables the exit error report

Segment 4

1 = On: enables late to close / early to open reporting
2 = On: enables auto arm in STAY mode
3 = On: enables instant NIGHT mode
4 = On: tamper when sensor lost if armed
5 = On: enables instant STAY mode (toggle)
6 = On: arming allowed with tamper memory / communication failure/ expander trouble
7 = On: arming allowed with battery trouble
8 = On: keyswitch zone arms in STAY mode

Segment 5

1 = On: Disables auto-bypassing of force armable zones at the end of the exit delay
2 = Reserved
3 = Reserved
4 = Reserved
5 = Reserved
6 = Reserved
7 = Reserved
8 = Reserved

Entry/Exit timers

LOCATION 24 - ENTRY / EXIT TIMERS (6 segments, numerical data)

Location 24 is used to program the entry/exit times. There are 2 separate entry/exit times.

Segment 1	Entry time 1	This is the entry time that will be used when a delay 1 zone type initiates an entry delay. Valid entries are 10-255 seconds.
Segment 2	Exit time 1	This is the exit time that will be used for all zones designated as delay 1. Valid entries are 10-255 seconds.
Segment 3	Entry time 2	This is the entry time that will be used when a delay 2 zone type initiates an entry delay. Valid entries are 10-255 seconds.
Segment 4	Exit time 2	This is the exit time that will be used for all zones designated as delay 2. Valid entries are 10-255 seconds.

Segment 5 Reserved
Segment 6 Reserved

Zone configurations and partition selection

DEFAULT ZONE CONFIGURATIONS

Zones can be programmed to be one of thirty different zone configurations (zone types). The default zone configurations are listed below. Programming locations 110-169 can customise all zone configurations.

DATA	DESCRIPTION OF DEFAULT CONFIGURATION
1	**DAY ZONE** Instant when system is armed; trouble zone when system is disarmed.
2	**24 HOUR AUDIBLE** Creates an instant yelping siren alarm regardless of the arming state of the control panel. This zone type is not abortable. This zone can be bypassed.
3	**ENTRY/EXIT DELAY 1** A trip will start entry delay 1. Absence of a trip during the exit delay will enable the Automatic Bypass or Instant mode, if so programmed.
4	**FOLLOWER (WITH AUTO-BYPASS DISABLED)** This zone will be instant when the system is armed and no entry or exit delays are being timed. It is delayed during entry and exit delay times. This zone will not bypass automatically, even if enabled in segment 1 of location 23.
5	**INTERIOR FOLLOWER (WITH AUTO-BYPASS ENABLED)** This zone will be instant when the system is armed and no entry or exit delay is being timed. It is delayed during entry and exit delay times. This zone will bypass automatically, if enabled in segment 1 of location 23.
6	**INSTANT** This zone creates an instant alarm whenever it is tripped and the system is armed.
7	**24 HOUR SILENT** Creates an instant silent alarm regardless of the arming state of the control panel. It will not display on the keypad. This zone is not abortable, but can be bypassed.
8	**FIRE** Indicates a fire zone. This zone cannot be bypassed. The system will rapidly flash the Fire symbol on the keypad and sound the steady siren each time the zone is shorted. To acknowledge the fire alarm a user must enter the user code. After the alarm has been cancelled the Fire symbol still displays on the keypad until a user selects the *Detector Reset* menu option from the *Quick User* (or *User*) menu.
9	**ENTRY/EXIT DELAY 2** A trip will start entry delay 2. Absence of a trip during the exit delay will enable the automatic bypass or instant mode, if so programmed.
10	**24 HOUR AUDIBLE SUPERVISED** Creates an instant audible alarm, regardless of the arming state of the control panel. It will display on the keypad. This zone is not abortable and cannot be bypassed.
11	**MOMENTARY KEYSWITCH ZONE** This zone type will arm and disarm the partition or partitions of the control panel where it is resident, every time the zone state changes for a short time from R to 2R (for example, the Door-Window Switch is momentarily opened and then closed). Keyswitch arming will report as User 99 in logs and reports. This zone type can only belong to 1 partition.
12	**INTERIOR FOLLOWER WITH "CROSS ZONE" ENABLED** This zone will be instant when the system is armed and no entry or exit delay is being timed. It is delayed during entry and exit delay times. If a "Cross Zone" is not being timed, it will start a "Cross Zone" timer. If a "Cross Zone" is being timed, it will create an instant alarm. This zone will bypass automatically, when enabled in segment 1 of location 23.

13	**INSTANT ENTRY GUARD** This zone creates an instant alarm whenever it is tripped and the zone is timed. It will start an entry delay time 2 if it is tripped, provided that the system is armed and the stay/instant mode is on.
14	**ENTRY/EXIT DELAY 1 WITH GROUP BYPASS ENABLED** A trip will start entry delay 1. This zone will bypass when the "Group Bypass" command is entered at the keypad. Absence of a trip during exit delay will enable the automatic bypass or instant mode, if so programmed.
15	**INTERIOR FOLLOWER WITH GROUP BYPASS ENABLED** This zone will be instant when the system is armed and no entry or exit delays are being timed. It is delayed during entry/exit delay times. This zone will bypass when the "Group Bypass" command is entered at the keypad. This zone will bypass automatically, if enabled in segment 1 of location 23.
16	**INSTANT WITH GROUP BYPASS ENABLED** This zone creates an instant alarm whenever it is tripped and the system is armed. This zone will bypass when the "Group Bypass" command is entered at the keypad
17	**MAINTAINED KEYSWITCH** This zone type will arm/disarm the partition or partitions of the control panel where it is resident, as long as the zone state is changed from R to 2R (for example, the Door-Window Switch is opened or closed) and kept in this state. Keyswitch arming will report as user 99 in logs and reports.
18	**ENTRY/EXIT DELAY 1 FORCE ARMABLE** A trip will start entry delay 1. Absence of a trip during exit delay will enable the automatic bypass or instant mode, if so programmed. This zone is force armable, which means the system can be "Force Armed" even if this zone has been violated. In this condition, the "Ready" icon will flash indicating the zone is not secure. At the end of the exit delay, the zone will be bypassed. If the zone becomes secured at any time during the arming cycle, it will be unbypassed and will become active in the system. If "Bypass Report" is enabled, the force arming zones can be programmed to report bypass when they are force armed (default).
19	**ENTRY/EXIT DELAY 2 FORCE ARMABLE** A trip will start entry delay 2. Absence of a trip during exit delay will enable the automatic bypass or instant mode, if so programmed. This zone is force armable (see description above).
20	**ENTRY/EXIT DELAY 1 WITH CHIME ENABLED** A trip will start entry delay 1. Absence of a trip during exit delay will enable the automatic bypass or instant mode, if so programmed. When the control panel is disarmed and the chime mode has been set, this zone will act as a chime zone.
21	**TECHNICAL ALARM, SUPERVISED, AUDIBLE** Any trip on a technical zone creates an audible alarm, regardless of the arming state of the control panel. This zone can be bypassed.
22	**TECHNICAL ALARM, SUPERVISED, SILENCE** Any trip on a silent technical zone creates a silent alarm, regardless of the arming state of the control panel. Only the transmitter will be activated. This zone can be bypassed.
23	**INTERIOR INSTANT ZONE** This zone creates an instant alarm whenever it is tripped during the arming state of the control panel. This zone will bypass automatically, if enabled in segment 1 of location 23, or when this system is armed in the "Stay" mode.
24	**INSTANT ZONE WITH CHIME ENABLED** A trip will create an alarm when the system is armed. When the control panel is disarmed and the chime mode has been set, this zone will act as a chime zone.
25	**FOLLOWER ZONE WITH CHIME ACTIVATED** This zone will be instant when the system is armed and no entry or exit delays are being timed. It is delayed during entry and exit delay times. This zone will not bypass automatically, even if enabled in segment 1 of location 23. When the control panel is disarmed and the chime mode has been set, this zone will act as a chime zone.
26	**24 HOUR, AUDIBLE, SUPERVISED, LOCAL** Creates an instant audible alarm, regardless of the arming state of the control panel. It will display on the keypad. This zone type will NOT be reported.
27	**INSTANT ZONE FORCE ARMABLE** This zone creates an instant alarm whenever the system is armed. This zone is force armable (see feature definitions, pages 5-11).
28	**INSTANT ZONE ACTIVITY MONITOR ENABLED** This zone creates an instant alarm whenever the system is armed. It will send a report if the zone

	activity time is reached without a change of state (see location 40, segment 11 and locations 110-169).
29	**INSTANT ZONE WITH END OF LINE RESISTOR DEFEAT** This zone creates an instant alarm whenever the system is armed. When the loop is closed, the zone is ready. Opening of the loop means a faulted zone (see locations 110-169).
30	**24 HOUR, MEDICAL, AUDIBLE, SUPERVISED** Creates an instant audible alarm, regardless of the arming state of the control panel. It will display on the keypad. A medical report will be sent to the CMS.

LOCATION 25 - ZONES 1-8 CONFIGURATION GROUP (8 segments, numerical data)

Location 25 contains the configuration group (zone type) for zones 1-8. Segment 1 is for zone 1, and segment 8 is for zone 8. You will find the default configurations in the table above.

LOCATION 26 - PARTITION SELECT, ZONES 1-8 (8 segments, feature selection data)

Location 26 is used to select the partition(s) in which zones 1 - 8 reside. A zone may reside in any combination of the 4 partitions. If a burglary zone resides in more than 1 partition, that zone will only be active when all the partitions in which it is resident in are armed. A zone that resides in more than 1 partition will be reported to its lowest partition number. Location 26 has 8 segments. Segment 1 corresponds to zone 1, and segment 8 corresponds to zone 8.

Segment 1-8
1 = Partition 1
2 = Partition 2
3 = Partition 3
4 = Partition 4

LOCATION 27 - ZONES 9-16 CONFIGURATION GROUP (8 segments, numerical data)

Location 27 contains the configuration group (zone type) for zones 9 -16. Segment 1 is for zone 9, and segment 8 is for zone 16. You will find the default configurations in the table above.

LOCATION 28 - PARTITION SELECT, ZONES 9-16 (8 segments, feature selection data)

Location 28 is used to select the partition(s) in which zones 9-16 reside. A zone may reside in any combination of the 4 partitions. If a burglary zone resides in more than 1 partition, that zone will only be active when all the partitions are armed. A zone that resides in more than 1 partition will be reported to its lowest partition. Location 28 has 8 segments. Segment 1 corresponds to zone 9 and Segment 8 corresponds to zone 16.

Segment 1-8
1 = Partition 1
2 = Partition 2
3 = Partition 3
4 = Partition 4

LOCATION 29 - ZONES 17-24 CONFIGURATION GROUP (8 segments, numerical data)

Location 29 contains the configuration group (zone type) for zones 17-24. Segment 1 is for zone 17, segment 8 is for zone 24. You will find the default configurations in the table above.

LOCATION 30 - PARTITION SELECT, ZONES 17-24 (8 segments, feature selection data)

Location 30 is used to select the partition(s) in which zones 17-24 reside. A zone may reside in any combination of the 4 partitions. If a burglary zone resides in more than 1 partition, that zone will only be active when all the partitions are armed. A zone that resides in more than 1 partition will be reported to its lowest partition. Location 30 has 8 segments. Segment 1 corresponds to zone 17 and segment 8 corresponds to zone 24.

Segment 1-8

1 = Partition 1
2 = Partition 2
3 = Partition 3
4 = Partition 4

LOCATION 31 - ZONES 25-32 CONFIGURATION GROUP (8 segments, numerical data)

Location 31 contains the configuration group (zone type) for zones 25-32. Segment 1 is for zone 25, segment 8 is for zone 32. You will find the default configurations in the table above.

LOCATION 32 - PARTITION SELECT, ZONES 25-32 (8 segments, feature selection data)

Location 32 is used to select the partition(s) in which zones 25-32 reside. A zone may reside in any combination of the 4 partitions. If a burglary zone resides in more than 1 partition, that zone will only be active when all the partitions are armed. A zone that resides in more than 1 partition will be reported to its lowest partition. Segment 1 corresponds to zone 25 and segment 8 corresponds to zone 32.

Segment 1-8

1 = Partition 1
2 = Partition 2
3 = Partition 3
4 = Partition 4

LOCATION 33 - ZONES 33-40 CONFIGURATION GROUP (8 segments, numerical data)

Location 33 contains the configuration group (zone type) for zones 33-40. Segment 1 is for zone 33, and segment 8 is for zone 40. You will find the default configurations in the table above.

LOCATION 34 - PARTITION SELECT, ZONES 33-40 (8 segments of feature selection data)

Location 34 is used to select the partition(s) in which zones 33-40 reside. A zone may reside in any combination of the 4 partitions. If a burglary zone resides in more than 1 partition, that zone will only be active when all partitions are armed. A zone that resides in more than 1 partition will be reported to its lowest partition. Segment 1 corresponds to zone 33 and segment 8 corresponds to zone 40.

Segment 1-8
1 = Partition 1
2 = Partition 2
3 = Partition 3
4 = Partition 4

LOCATION 35 - ZONES 41-48 CONFIGURATION GROUP (8 segments of numerical data)

Location 35 contains the configuration group (zone type) for zones 41-48. Segment 1 is for zone 41, and segment 8 is for zone 48. You will find the default configurations in the table above.

LOCATION 36 - PARTITION SELECT, ZONES 41-48 (8 segments, feature selection data)

Location 36 is used to select the partition or partitions in which zones 41-48 reside. A zone may reside in any combination of the 4 partitions. If a burglary zone resides in more than 1 partition, that zone will only be active when all the partitions are armed. A zone that resides in more than 1 partition will be reported to its lowest partition. Location 36 has 8 segments. Segment 1 corresponds to zone 41 and segment 8 corresponds to zone 48.

Segment 1-8
1 = Partition 1
2 = Partition 2
3 = Partition 3
4 = Partition 4

General options

LOCATION 37 - SIREN AND SYSTEM SUPERVISION (7 segments, feature selection data)

Location 37 is used to enable various system feature and reporting options. Please note that since the I/O module in the wireless siren acts as an output expander, the wireless siren's behaviour is different than the BELL output's behaviour in some cases.

Segment 1
1 = On: if siren sounds for “Telephone Line Cut” when armed
2 = On: if siren sounds for “Telephone Line Cut” when disarmed
3 = On: if siren* blast at arming (pulse)
4 = On: if siren* blast at exit expiration (pulse)
5 = On: if siren* blast at closing kiss-off (pulse)
6 = On: if siren sounds during a “Cross Zone” verification time
7 = On: if siren sounds for a zone or box tamper
8 = On: if siren* blasts 1 time for keyswitch or wireless arming; 2 times for disarming

***** BELL output only on NetworX V3

Segment 2

1 = On: if siren driver should be a voltage output. Off: if on-board siren driver is enabled
2 = On: if sirens* sound for expander trouble
3 = On: for zones to restore immediately. Off: for zones to restore only when the siren is off or disarmed
4 = On: if dynamic battery test is performed at arming. Off: if dynamic battery test is performed at disarming (See location 40)
5 = On: if battery missing test is performed every 12 seconds
6 = On: if manual bell (BELL output, I/O and relays) test is performed during self test function
7 = On: if manual communicator test is performed during self test function
8 = On: if Box Tamper terminals on the control panel are enabled

***** BELL output only on NetworX V3

Segment 3

1 = On: if box tamper report is enabled
2 = On: if AC fail reporting is enabled
3 = On: if low battery reporting is enabled
4 = On: if Aux. power overcurrent report is enabled
5 = On: if siren supervision report is enabled
6 = On: if restore telephone line cut report is enabled
7 = On: A+B Alarm. Off: cross-zoning
8 = On: if expander trouble reporting is enabled

Segment 4

1 = On: if fail to communicate report is enabled
2 = On: if log full report is enabled
3 = On: if autotest report is enabled
4 = On: if start/end programming report is enabled
5 = On: if end download report is enabled
6 = On: if sensor low battery report is enabled
7 = On: if sensor missing report is enabled
8 = On: if autotest report is enabled ONLY when the system is armed

Segment 5

1 = On: enable lost clock indication
2 = Reserved
3 = Reserved
4 = On: will allow two trips on same cross-zone to activate an alarm
5 = On: will not allow zones that are force armed to report bypass
6 = On: enables silent exit option
7 = On: activate “first disarm reporting” - “last arm reporting” for partitions
8 = On: switch “summer/wintertime” and vice versa

Segment 6

1 = Reserved
2 = On: Use internal crystal for clock
3 = On: zone activity monitor in hours (not in days)
4 = On: enables first alarm logic
5 = On: enables log protection
6 = On: disables Clean Me report
7 = On: siren* output is steady in case of fire alarm
8 = On: valid user code will reset tamper memory

* BELL output only on NetworX V3

Segment 7

1 = On: dial via GSM when phone line trouble (*)
2 = On: Exit Error limited to Entry/Exit delay 1
3-8 Reserved

(*) Note: This feature is only used when the GSM module is enrolled by the panel and if the GSM module is used as backup (GSM voice channel) for the PSTN dialer of the panel. Also telephone line monitoring needs to be enabled in location 40. Do not use this feature as the only backup feature of the PSTN dialer but use this in addition with the standard backup options as described in the GSM module manual.

LOCATION 38 - SWINGER SHUTDOWN COUNT

Location 38 contains the number of trips on a zone before that zone will be automatically bypassed. From 0 to 255. Refer to the feature definitions.

LOCATION 39 - KEYPAD SOUNDER CONTROL (1 segment, feature selection data)

Segment 1
1 = On: if keypad sounds for "Telephone Line Cut" when the system is armed
2 = On: if keypad sounds for "Telephone Line Cut" when disarmed
3 = On: if keypad sounds for an AC power failure
4 = On: if keypad sounds when a low battery is detected
5 = On: if keypad sounds during cross zone trip time
6 = On: if keypad sounds for zone and box tampers
7 = On: if keypad sounds for Emergency keys
8 = Expander trouble

LOCATION 40 - SYSTEM TIMERS (14 segments, numerical data)

Location 40 contains the duration of various system timing functions. Example: If you want the duration of the dynamic battery test to be 30 minutes, you should program [3]- [0]-[*] in segment 1 of this location. The [3]-[0] is the number of minutes; the [*] stores the data, and moves to the next segment of this location.

Segment 1 Dynamic battery test duration in minutes, 0-30 minutes ("0" = no test)
Segment 2 AC fail report delay in minutes, 0-255 minutes
Segment 3 Power up delay in seconds, 0-60 seconds ("0" = no power up delay)
Segment 4 Siren time in minutes, 1-255 minutes
Segment 5 Telephone line cut delay in seconds, 0-255 seconds ("0" = no telephone line monitoring enabled)
Segment 6 Cross zone time in minutes, 0-255 ("0" = no cross zoning)
Segment 7 Chime time in 50 ms. (1/ 20th second) increments from 0-12 seconds ("0" = follows zone 255 latched)
Segment 8 Dial delay in seconds, 0-255 seconds (0 no abort delay)
Segment 9 Fire alarm verification time in seconds, 120-255 seconds ("0" = no fire alarm verification). Values less than 120 s. are considered as 120 s.
Segment 10 Listen-in time in seconds, 0-255 (" 0" = no listen-in time)
Segment 11 Zone activity monitor feature timed in hours/days, 0-255 ("0" = disabled)
Segment 12 Auto arming warning timer, 1-255 minutes
Segment 13 Auto arming retry timer, 1-255 minutes
Segment 14 Programming Timeout, 1-255 minutes ("0" = 15 minutes)

LOCATION 41 - CODE REQUIREMENTS (1 segment, feature data)

Segment 1
1 = On: enables the 6-digit code option. If 6-digit option is enabled, all

arm/disarm codes and the installer code are 6 digits. If this option is enabled, the default user 1 code is [1]-[2]-[3]-[4]-[5]-[6].

Note: If you enable this option, verify that the installer code is a six-digit code before you exit from programming

2 = On: requires code entry for the perform callback download function and the answer incoming call for download function
3 = On: enables Auto Cancel / Abort
4 = Reserved
5 = On: keypad shutdown mode
6 = On: user authorization to enter program mode
7 = On: codes 16 and 17 are guard codes
8 = Reserved

LOCATION 42 - INSTALLER CODE (6 segments, numerical data)

Location 42 contains the installer code ("Go To Program" code). This location contains a code with either 4 or 6 digits. If the 6-digit code option is enabled in Location 41, THIS CODE MUST CONTAIN SIX (6) DIGITS. If this option is not enabled in location 41, the last 2 segments (digits) will be ignored. With the NetworX system disarmed, the installer code can be used to enter the program mode.

LOCATION 43 - GO TO PROGRAM CODE PARTITION AND AUTHORIZATION (2 segments, feature selection data)

The "Go To Program Code" can be used as a standard arm/disarm code. When using the code to arm or disarm, the user ID is 255. (It is not possible to change this code in the run mode).

Segment 1
1 = Reserved
2 = On: enables "Go To Program Code" as an arm only code
3 = On: enables "Go To Program Code" as an arm only, after closing
4 = On: enables "Go To Program Code" as a master arm/disarm code (can change user codes)
5 = On: enables "Go To Program Code" as an arm/disarm code
6 = On: enables "Go To Program Code" to bypass zones
7 = On: enables "Go To Program Code" opening and closing reports
8 = Reserved

Segment 2
1 = On: enables the "Go To Program Code" for partition 1
2 = On: enables the "Go To Program Code" for partition 2
3 = On: enables the "Go To Program Code" for partition 3
4 = On: enables the "Go To Program Code" for partition 4

LOCATION 44 - DURESS CODE (6 segments, numerical data)

Location 43 contains the "Duress" code. This Location contains either 4 or 6 digits. If the 6-digit code option is enabled in location 41, THIS CODE MUST CONTAIN SIX (6) DIGITS. If the 6-digit option is not enabled in location 41, the last 2 digits will be ignored. If the duress code is programmed, it will work for all partitions.

Programming the outputs

LOCATION 45 - AUXILIARY OUTPUT 1-2 PARTITION SELECTION (2 segments, feature selection data)

Location 45 is used to select the partition(s) in which the events must occur before the output (relay) will activate. Location 45 has 2 segments. Segment 1 corresponds to output 1, and segment 2 corresponds to output 2.

Segment 1 (Auxiliary 1)	Segment 2 (Auxiliary 2)
1= Partition #1	1= Partition #1
2= Partition #2	2= Partition #2
3= Partition #3	3= Partition #3
4= Partition #4	4= Partition #4

LOCATION 46 - AUXILIARY OUTPUT 1-2 SPECIAL TIMING (2 segments, feature selection data)

Location 46 contains special timing feature activation for the 2 auxiliary outputs (relays). Segment 1 corresponds to output 1, segment 2 corresponds to output 2.

Segment 1-2

1 = On: if output should be timed in minutes; Off: if timed in seconds
2 = On: if output should latch; Off: if output should be timed
3 = On: if output should stop timing when the code is entered; Off: if the output should continue to time when the code is entered
4 = On: if output should only activate between the closing and opening time in locations 52 and 53
5 = On: if output should only activate between the opening and closing time in locations 52 and 53
6 = On: if output should be inverted
7 = Reserved
8 = Reserved

LOCATION 47 - AUXILIARY OUTPUT 1 (relay 1), EVENT AND TIME (2 segments, numerical data)

Segment 1 Use the chart below to select the event that will activate auxiliary output 1 (relay 1)
Segment 2 Program the timing from 0-255 (minutes or seconds, depending on the data programmed in segment 1, location 46). Programming a "0" makes the output follow the event

LOCATION 48 - AUXILIARY OUTPUT 2 (relay 2), EVENT AND TIME (2 segments, numerical data)

Segment 1 Use the chart below to select the event that will activate auxiliary output 2 (relay 2)
Segment 2 Program the timing from 0-255 (minutes or seconds, depending on the data programmed in segment 2, location 46). Programming a "0" makes the output follow the event

Table 17. Auxiliary output event selection

Data	Event	Data	Event
0✓	Burglary alarm	30	Open period
1✓	Fire alarm	31	Closed period
2✓	24 hour alarm	32	Listen-in
3✓	Trouble alarm	33	Line seizure
4	Tamper alarm	34	Reserved
5	Yelping siren	35	Fail to communicate
6	Steady siren	36	Telephone line fault
7	Any siren	37	Program mode
8	Any bypass	38	Download in process
9	AC fail	39	Reserved
10	Low battery	40	Short circuit (overcurrent on 12 V DC)
11✓	Duress	41	Box tamper
12✓	Aux 1 keypad (fire alarm)	42	Siren tamper
13✓	Aux 2 keypad (medical alarm)	43	Any open
14✓	Panic keypad	44	Any short
15	Keypad tamper	45	Any fault (open/short on non-fire zone)
16✓	Autotest	46✓	Any alarm
17	Alarm memory (solid)	47	Beeping keypad
18	Entry	48♦✓	Code entry (see note below)
19	Exit	49♣✓	Key FOB function 1
20	Entry or exit	50♣✓	Key FOB function 2
21	Armed state	51	Always ON
22	Disarmed state	52	Autoarm warning time
23	Ready	53	Any siren when in away mode
24	Not ready	54	Progress of entry/exit (follows keypad buzzer)
25	Fire	55	Auxiliary communication failure
26	Fire trouble	56	Radio test
27	Chime	57	Any siren when armed in any mode
28✓	Expander trouble	58	Alarm memory (pulsating)
29	Dynamic battery test time	59	Zone inactivity

Notes:

- ♦ When event 48 is programmed, it is possible to program a user code authorisation to select the output(s), which a particular code will activate.
- ♣ Events 49 and 50 require one or more of the following to operate: wireless receivers or cardreaders.
- ✓ If set to follow condition, these events will be 1 second.

Setup for auto-test, auto-arm and opening/closing times

LOCATION 51 - AUTOTEST CONTROL (4 segments, numerical data)

Segment 1 Program a "1" if the interval is to be in hours; program a "0" for days. Add a "2" to suppress the daily test or a "3" to suppress the hourly test if any report has been sent

Segment 2 Program the autotest interval from 1-255 hours/days

Segment 3 Program the autotest report hour in 24 hour format (if the interval is in hours, this segment Is ignored)

Segment 4 Program the autotest report time, number of minutes after the hour

LOCATION 52 - OPENING TIME/AUTOMATIC DISARMING TIME (2 segments, numerical data)

Location 52 contains the time (in 24 hour format) when the NetworX V3 will enable the disarm capability for codes designated as 'arm only after closing'. This time is only valid on those days programmed in location 54. This is also the time when the panel will automatic disarm.

Note: Opening time must be earlier than closing time so that auto arm, Aux. outputs, or code authorisation can function properly.

Segment 1 Program the hour of the opening time
Segment 2 Program the minutes after the hour of the opening time

LOCATION 53 - CLOSING TIME/AUTOMATIC ARMING TIME (2 segments, numerical data)

Location 53 contains the time (in 24 hour format) when the NetworX V3 will disable the disarm capability for codes designated as 'arm only after closing'. This is also the time when the automatic arming sequence will begin (if this option is enabled in location 55).

Note: Opening time must be earlier than closing time so that auto arm, auxiliary outputs, or code authorisation can function properly.

Segment 1 Program the hour of the closing / auto arm time
Segment 2 Program the minutes after the hour of the closing / auto arm time

LOCATION 54 - DAYS OF THE WEEK "ARM ONLY AFTER CLOSE WINDOW" CODES FUNCTION IN PARTITIONS 1 THRU 4 (4 Segments, feature selection data)

Location 54 selects the days of the week on which each partition is open. On these days, "arm only after close window" codes will be able to arm and disarm during "open window". On days not selected here, "arm only after close window" codes will not disarm. Segment 1 is for partition 1, and segment 4 is for partition 4 (see locations 52 and 53 for the opening and closing times for the open days).

Segment 1-4

1 = "Arm only after close window" will arm/disarm on Sunday
2 = "Arm only after close window" will arm/disarm on Monday
3 = "Arm only after close window" will arm/disarm on Tuesday
4 = "Arm only after close window" will arm/disarm on Wednesday
5 = "Arm only after close window" will arm/disarm on Thursday
6 = "Arm only after close window" will arm/disarm on Friday
7 = "Arm only after close window" will arm/disarm on Saturday
8 = Reserved

LOCATION 55 - DAYS OF THE WEEK FOR AUTO ARMING IN PARTITIONS 1 THRU 4 (4 segments, feature selection data)

Location 55 selects the days on which each partition will auto-arm. Segment 1 is for partition 1, and segment 4 is for partition 4. If a zone is faulted before the warning timer and stays faulted during the

warning timer, the zone will automatically be bypassed. If the zone restores, it will be unbypassed and active in the system.

Segment 1-4

1 = Auto arming on Sunday
2 = Auto arming on Monday
3 = Auto arming on Tuesday
4 = Auto arming on Wednesday
5 = Auto arming on Thursday
6 = Auto arming on Friday
7 = Auto arming on Saturday
8 = Disable retry timer

Communicator codes for slow speed formats only

Note: Locations 56-83 are only used when reporting events to a pager, or when using a slow format such as 4+2. When using Contact ID or SIA, there is no need to program these locations.

LOCATION 56 - RESTORE COMMUNICATOR CODE, SLOW SPEED FORMATS ONLY (4 segments, numerical data)

Location 56 contains the event code for a zone "Restore" for a 4+2 and 3+1 format. For a 4+2 format, the digit programmed in this location will be sent as the tens digit of the restore event code. The zone ID will always be reported as the ones digit of the zone number (e.g. zone 12 = 2, zone 44 = 4).

This location contains 4 segments. Any segment left as "0" will follow the segment 1 selection.

Segment 1	Partition 1	"Restore Code"
Segment 2	Partition 2	"Restore Code"
Segment 3	Partition 3	"Restore Code"
Segment 4	Partition 4	"Restore Code"

LOCATION 57 - BYPASS COMMUNICATOR CODE, SLOW SPEED FORMATS ONLY (4 segments, numerical data)

Location 57 contains the event code for a zone "Bypass" with a 4+2 and 3+1 format. For a 4+2 format, the digit programmed in this location will be sent as the tens digit of the bypass event code. The zone ID will always be reported as the ones digit of the zone number (e.g. zone 12 = 2, zone 44 = 4).

This location contains 4 segments. Any segment left as "0" will follow the segment 1 selection.

Segment 1	Partition 1	"Bypass Code"
Segment 2	Partition 2	"Bypass Code"
Segment 3	Partition 3	"Bypass Code"
Segment 4	Partition 4	"Bypass Code"

LOCATION 58 - TAMPER COMMUNICATOR CODE, SLOW SPEED FORMATS (4 segments, numerical data)

Location 58 contains the event code for a zone "Tamper" with a 4+2 and 3+1 format. For a 4+2 format, the digit programmed in this location will be sent as the tens digit of the tamper event code. The zone ID will always be reported as the ones digit of the zone number (e.g. zone 12 = 2, zone 44 = 4).

This location contains 4 segments. Any segment left as "0" will follow the segment 1 selection.

Segment 1	Partition 1	"Tamper Code"
Segment 2	Partition 2	"Tamper Code"
Segment 3	Partition 3	"Tamper Code"
Segment 4	Partition 4	"Tamper Code"

LOCATION 59 - TROUBLE COMMUNICATOR CODE, SLOW SPEED FORMATS ONLY (4 segments, numerical data)

Location 59 contains the event code for a zone "Trouble" with a 4+2 and 3+1 format. For the 4+2 format, the digit programmed in this location will be sent as the tens digit of the trouble event code. The zone ID will always be reported as the ones digit of the zone number (e.g. zone 12 = 2, zone 44 = 4).

This location contains 4 segments. Any segment left as "0" will follow segment 1 selection.

Segment 1	Partition 1	"Trouble Code"
Segment 2	Partition 2	"Trouble Code"
Segment 3	Partition 3	"Trouble Code"
Segment 4	Partition 4	"Trouble Code"

LOCATION 60 - SENSOR LOW BATTERY COMMUNICATOR CODE, SLOW SPEED FORMATS ONLY (4 segments, numerical data)

Location 60 contains the event code for a zone "Sensor Low Battery" for a 4+2 and 3+1 format. For a 4+2 format, the digit programmed in this location will be sent as the tens digit of the sensor low battery event code. The zone ID will always be reported as the ones digit of the zone number (e.g. zone 12 = 2, zone 44 = 4).

This location contains 4 segments. Any segment left as "0" will follow the Segment 1 selection.

Segment 1	Partition 1	"Sensor Low battery Code"
Segment 2	Partition 2	"Sensor Low battery Code"
Segment 3	Partition 3	"Sensor Low battery Code"
Segment 4	Partition 4	"Sensor Low battery Code"

LOCATION 61 - SENSOR MISSING COMMUNICATOR CODE, SLOW SPEED FORMATS ONLY (4 segments, numerical data)

Location 61 contains the event code for a zone "Sensor-missing" for a 4+2 and 3+1 format. For a 4+2 format, the digit programmed in this location will be sent as the tens digit of the sensor missing event

code. The zone ID will always be reported as the ones digit of the zone number (e.g. zone 12 = 2, zone 44 = 4).

This location contains 4 segments. Any segment left as "0" will follow the Segment 1 selection.

Segment 1	Partition 1	"Sensor Missing Code"
Segment 2	Partition 2	"Sensor Missing Code"
Segment 3	Partition 3	"Sensor Missing Code"
Segment 4	Partition 4	"Sensor Missing Code"

LOCATION 62 - DURESS COMMUNICATOR CODE, SLOW SPEED FORMATS ONLY (2 segments, numerical data)

Location 62 contains the tens and ones digits that will be sent for a 4+2 and 3+1 format if the duress code is enabled in location 44. Segment 1 contains the tens digit, and segment 2 contains the ones digit.

For a 3+1 format, only the segment 1 digit (tens) will be sent.

LOCATION 63 - KEYPAD AUXILIARY 1 COMMUNICATOR CODE, SLOW SPEED FORMATS ONLY (2 segments, numerical data)

Location 63 contains the tens and ones digits that will be sent for a 4+2 and 3+1 format if the keypad "Auxiliary 1" (FIRE) is enabled in the partition feature selection. Segment 1 contains the tens digit; segment 2 contains the ones digit.

For a 3+1 format, only the segment 1 digit (tens) will be sent.

LOCATION 64 - KEYPAD AUXILIARY 2 COMMUNICATOR CODE, SLOW SPEED FORMATS ONLY (2 segments, numerical data)

Location 64 contains the tens and ones digits that will be sent for a 4+2 and 3+1 format if the keypad "Auxiliary 2" (MEDICAL) is enabled in the partition feature selection. Segment 1 contains the tens digit; segment 2 contains the ones digit.

For a 3+1 format, only the segment 1 digit (tens) will be sent.

LOCATION 65 - KEYPAD PANIC COMMUNICATOR CODE, SLOW SPEED FORMATS ONLY (2 segments, numerical data)

Location 65 contains the tens and ones digits that will be sent for a 4+2 and 3+1 format if the keypad "Panic" is enabled in the partition feature selection. Segment 1 contains the tens digit, and segment 2 contains the ones digit.

For a 3+1 format, only the segment 1 digit (tens) will be sent.

LOCATION 66 - KEYPAD MULTIPLE CODE ENTRY TAMPER COMMUNICATOR CODE, SLOW SPEED FORMATS ONLY (2 segments, numerical data)

Location 66 contains the tens and ones digits that will be sent for a 4+2 and 3+1 format if the keypad "Multiple Code Entry" (Tamper) is enabled in the partition feature selection. Segment 1 contains the tens digit, and segment 2 contains the ones digit.

For a 3+1 format, only the segment 1 digit (tens) will be sent.

LOCATION 67 - BOX TAMPER / BOX TAMPER RESTORE COMMUNICATOR CODE, SLOW SPEED FORMATS ONLY (4 segments, numerical data)

Location 67 contains the tens and ones digits that will be sent for a 4+2 and 3+1 format if the "Box Tamper" feature is enabled in location 37. Segment 1 contains the tens digit of the "Box Tamper". Segment 2 contains the ones digit of the "Box Tamper". Segment 3 contains the tens digit of the "Box Tamper Restore". Segment 4 contains the ones digit of the "Box Tamper Restore".

For a 3+1 format, only the segment 1 resp. segment 3 digit (tens) will be sent.

LOCATION 68 - AC FAIL / AC FAIL RESTORE COMMUNICATOR CODES, SLOW SPEED FORMATS ONLY (4 segments, numerical data)

Location 68 contains the tens and ones digits for a 4+2 and 3+1 format that will be sent if "AC Fail Reporting" is enabled. Segment 1 contains the tens digit of the "AC Fail Reporting". Segment 2 contains the ones digit of the "AC Fail Reporting". Segment 3 contains the tens digit of the "AC Fail Restore". Segment 4 contains the ones digit of the "AC Fail Restore".

For a 3+1 format, only the segment 1 resp. segment 3 digit (tens) will be sent.

LOCATION 69 - LOW BATTERY / LOW BATTERY RESTORE COMMUNICATOR CODES, SLOW SPEED FORMATS ONLY (4 segments, numerical data)

Location 69 contains the tens and ones digits for a 4+2 and 3+1 format that will be sent if "Low Battery Reporting" is enabled. Segment 1 contains the tens digit of the "Low Battery Reporting". Segment 2 contains the ones digit of the "Low Battery Reporting". Segment 3 contains the tens digit of the "Low Battery Restore". Segment 4 contains the ones digit of the "Low Battery Restore".

For a 3+1 format, only the segment 1 digit resp. segment 3 digit (tens) will be sent.

LOCATION 70 - AUX POWER OVERCURRENT/ AUX POWER OVERCURRENT RESTORE COMMUNICATOR CODES, SLOW SPEED FORMATS ONLY (4 segments, numerical data)

Location 70 contains the tens and ones digits for a 4+2 and 3+1 format that will be sent if "Aux Power Overcurrent Reporting" is enabled. Segment 1 contains the tens digit of the "Aux Power Overcurrent Reporting". Segment 2 contains the ones digit of the "Aux Power Overcurrent Reporting". Segment 3 contains the tens digit of the "Aux Power Overcurrent Restore". Segment 4 contains the ones digit of the "Aux Power Overcurrent Restore".

For a 3+1 format, only the segment 1 resp. segment 3 digit (tens) will be sent.

LOCATION 71 - BELL TAMPER AND BELL TAMPER RESTORE COMMUNICATOR CODES, SLOW SPEED FORMATS ONLY (4 segments, numerical data)

Location 71 contains the tens and ones digits for a 4+2 and 3+1 format that will be sent if siren supervision reporting is enabled. Segment 1 contains the tens digit of the "Bell Tamper Reporting". Segment 2 contains the ones digit of the "Bell Tamper Reporting". Segment 3 contains the tens digit of the "Bell Tamper Restore". Segment 4 contains the ones digit of the "Bell Tamper Restore".

For a 3+1 format, only the segment 1 resp. segment 3 digit (tens) will be sent.

LOCATION 72 - TELEPHONE LINE CUT RESTORE COMMUNICATOR CODES, SLOW SPEED FORMATS ONLY (4 segments, numerical data)

Location 72 contains the tens and ones digits for a 4+2 and 3+1 format that will be sent if "Telephone Line Cut Restore Reporting" is enabled. Segment 1 and segment 2 are reserved. Segment 3 contains the tens digit of the "Telephone Line Cut Restore". Segment 4 contains the ones digit of the "Telephone Line Cut Restore".

For a 3+1 format, only the segment 3 digit (tens) will be sent.

LOCATION 73 - Reserved

LOCATION 74 - EXPANDER TROUBLE AND EXPANDER TROUBLE RESTORE COMMUNICATOR CODES, SLOW SPEED FORMATS ONLY (4 segments, numerical data)

Location 74 contains the tens and ones digits for a 4+2 and 3+1 format that will be sent if "Expander Trouble Reporting" is enabled. Segment 1 contains the tens digit of the "Expander Trouble Reporting". Segment 2 contains the ones digit of the "Expander Trouble Reporting". Segment 3 contains the tens digit of the "Expander Trouble Restore". Segment 4 contains the ones digit of the "Expander Trouble Restore".

For a 3+1 format, only the segment 1 digit resp. segment 3 digit (tens) will be sent.

LOCATION 75 - FAIL TO COMMUNICATE COMMUNICATOR CODE, SLOW SPEED FORMATS ONLY (2 segments, numerical data)

Location 75 contains the tens and ones digits for a 4+2 and 3+1 format that will be sent if the "Fail To Communicate Reporting" is enabled. Segment 1 contains the tens digit, and segment 2 contains the ones digit.

For a 3+1 format, only the segment 1 digit (tens) will be sent.

LOCATION 76 - LOG FULL COMMUNICATOR CODE, SLOW SPEED FORMATS ONLY (2 segments, numerical data)

Location 76 contains the tens and ones digits for a 4+2 and 3+1 format if the "Log Full Reporting" is enabled. Segment 1 contains the tens digit, and segment 2 contains the ones digit.

For a 3+1 format, only the segment 1 digit (tens) will be sent.

LOCATION 77 - OPENING COMMUNICATOR CODE, SLOW SPEED FORMATS ONLY (8 segments, numerical data)

Location 77 contains the tens digit for a 4+2 and 3+1 format if "Opening Reporting" is enabled. The ones digit is the ones digit of the user number that did the opening. If the user is greater than 9, the numbers will begin repeating (e.g. code 6 = 6, code 45 = 5).

This location contains 8 segments. Any segment left as "0" will follow the segment 1 selection.

If you need to report openings and closings with a unique code per user, Contact ID or SIA format must be used.

Segment 1	Opening code for partition 1
Segment 2	Opening code for partition 2
Segment 3	Opening code for partition 3
Segment 4	Opening code for partition 4

LOCATION 78 - CLOSING COMMUNICATOR CODE, SLOW SPEED FORMATS ONLY (8 segments, numerical data)

Location 78 contains the tens digit for a 4+2 and 3+1 format if "Closing Reporting" is enabled. The ones digit is the ones digit of the user number that did the opening. If the user is greater than 9, the numbers will begin repeating (e.g. code 6 = 6, code 45 = 5).

This location contains 8 segments. Any segment left as "0" will follow the segment 1 selection.

If you need to report openings and closings with a unique code per user, Contact ID or SIA format must be used.

Segment 1	Closing code for partition 1
Segment 2	Closing code for partition 2
Segment 3	Closing code for partition 3
Segment 4	Closing code for partition 4

LOCATION 79 - AUTOTEST COMMUNICATOR CODE, SLOW SPEED FORMATS ONLY (2 segments, numerical data)

Location 79 contains the tens and ones digits for a 4+2 and 3+1 format that will be sent if "Autotest" or "Manual Test" is enabled. Segment 1 contains the tens digit, and segment 2 contains the ones digit.

For a 3+1 format, only the segment 1 digit (tens) will be sent.

LOCATION 80 - RECENT CLOSING AND EXIT ERROR COMMUNICATOR CODE, SLOW SPEED FORMATS ONLY (2 segments, numerical data)

Location 80 contains the tens digit for a 4+2 and 3+1 format that will be sent if "Recent Closing" and/or "Exit Error Reporting" is enabled. Segment 1 contains the tens digit for the "Recent Closing Reporting". Segment 2 contains the tens digit for the "Exit Error Reporting". The ones digit is the ones digit of the user number that did the opening. If the user is greater than 9, the numbers will begin repeating (e.g. code 6 = 6, code 45 = 5).

If you need to report Recent Closings and Exit Errors with a unique code per user, Contact ID or SIA format must be used.

LOCATION 81 - START PROGRAM AND END PROGRAM COMMUNICATOR CODES, SLOW SPEED FORMATS ONLY (4 segments, numerical data)

Location 81 contains the tens and ones digits for a 4+2 and 3+1 format that will be sent if "Start / End Programming Reporting" is enabled. Segment 1 contains the tens digit of the "Start Program Reporting". Segment 2 contains the ones digit of the "Start Program Reporting". Segment 3 contains the tens digit of the "End Program Reporting". Segment 4 contains the ones digit of the "End Program Reporting".

For a 3+1 format, only the segment 1 digit resp. segment 3 digit (tens) will be sent.

LOCATION 82 - END DOWNLOAD COMMUNICATOR CODE, SLOW SPEED FORMATS ONLY (4 segments, numerical data)

Location 82 contains the tens and ones digits for a 4+2 and 3+1 format that will be sent if "End Downloading Reporting" is enabled. Segment 1 and 2 are reserved. Segment 3 contains the tens digit of the "End Download Reporting". Segment 4 contains the ones digit of the "End Download Reporting".

Note: A start download report will be sent to the internal event log.

For a 3+1 format, only the segment 1 digit (tens) will be sent.

LOCATION 83 - CANCEL COMMUNICATOR CODE, SLOW SPEED FORMATS ONLY (1 segments, numerical data)

Location 83 contains the tens digit for a 4+2 and 3+1 format that will be sent if "Cancel Reporting" is enabled. Segment 1 contains the tens digit for the "Cancel Communicator Reporting". The ones digit is the ones digit of the user number that did the opening. If the user is greater than 9, the numbers will begin repeating (e.g. code 6 = 6, code 45 = 5).

If you need to report Cancels with a unique code per user, Contact ID or SIA format must be used.

LOCATION 84 - BUS FAULT AND BUS FAULT RESTORE COMMUNICATOR CODES, SLOW SPEED FORMATS ONLY (4 segments, numerical data)

Location 84 contains the tens and ones digits for a 4+2 and 3+1 format that will be sent if "Short circuits and ground faults" reporting is enabled. Segment 1 contains the tens digit of the "Bus Fault Reporting". Segment 2 contains the ones digit of the "Bus Fault Reporting". Segment 3 contains the tens digit of the "Bus Fault Restore". Segment 4 contains the ones digit of the "Bus Fault Restore".

For a 3+1 format, only the segment 1 digit resp. segment 3 digit (tens) will be sent.

LOCATIONS 85-87 - RESERVED

Programming partition parameters

Locations 88-109 are for programming different account codes and/or features for each partition. If a location is left unprogrammed, the feature for partition 1 and the account code for the phone number will be used.

LOCATION 88 - ACCOUNT CODE FOR PARTITION 1 (6 segments, numerical data)

Location 88 contains the account code that is sent when partition 1 is reported. If location 88 is left unprogrammed (all "10"s), then the account code corresponding to the phone number that is dialled will be used. If the account code is less than six digits, program a "10" in the segment immediately after the last digit of the account code. If the account code is 6 digits long, program all 6 segments.

LOCATION 89 - ACCOUNT CODE FOR PARTITION 2 (6 segments, numerical data)

Location 89 contains the account code that is sent when partition 2 is reported. If location 89 is left unprogrammed (all "10"s), then the account code corresponding to the phone number that is dialled will be used. If the account code is less than six digits, program a "10" in the segment immediately after the last digit of the account code. If the account code is 6 digits long, program all 6 segments.

LOCATION 90 - PARTITION 2 FEATURE AND REPORTING SELECTIONS (5 segments, feature selection data)

Location 90 is used to enable certain features that the user can access or see from the keypad of the system. In addition, certain communicator reports are enabled in this location. Each of these features can be enabled by partition. This location contains 5 segments, with eight possible features per segment. Refer to location 23 for the feature selections. If all the segments are blank (nothing enabled), the features for partition 1 will be used.

LOCATION 91 - PARTITION 2 ENTRY EXIT TIMERS (6 segments, numerical data)

Location 91 is used to enter the entry and exit times, in seconds. There are 2 separate entry and exit times. Valid entries are 10-255 seconds. If all the segments are "0", the entry and exit times for partition 1 will be used.

Segment 1	Entry time 1	Entry time that will be used when a delay 1 zone type initiates an entry delay
Segment 2	Exit time 1	Exit time that will be used for all zones designated as delay 1
Segment 3	Entry time 2	Entry time that will be used when a delay 2 zone type initiates an entry delay
Segment 4	Exit time 2	Exit time that will be used for all zones designated as delay 2
Segment 5	Reserved	
Segment 6	Reserved	

LOCATION 92 - ACCOUNT CODE FOR PARTITION 3 (6 segments, numerical data)

The account code that is sent when reporting partition 3 is programmed in location 92. If location 92 is left unprogrammed (all "10"), then the account code corresponding to the phone number that is dialled will be used. If the account code is less than six digits, program a "10" in the segment immediately after the last digit of the account code. If the account code is 6 digits long, program all 6 segments.

LOCATION 93 - PARTITION 3 FEATURE AND REPORTING SELECTIONS (5 segments, feature selection data)

Location 93 is used to enable certain features that the user can access or see from the keypad of the system. In addition, certain communicator reports are enabled in this location. Each of these features can be enabled by partition. This location contains 5 segments, with eight possible features per segment. Refer to location 23 for the feature selections. If all the segments are blank (nothing enabled), the features for partition 1 will be used.

LOCATION 94 - PARTITION 3 ENTRY EXIT TIMERS (6 segments, numerical data)

Location 94 is used to enter the entry and exit times, in seconds. There are 2 separate entry and exit times. Valid entries are 10-255 seconds. If all the segments are "0", the entry and exit times for partition 1 will be used.

Segment 1	Entry time 1	Entry time that will be used when a delay 1 zone type initiates an entry delay
Segment 2	Exit time 1	Exit time that will be used for all zones designated as delay 1
Segment 3	Entry time 2	Entry time that will be used when a delay 2 zone type initiates an entry delay
Segment 4	Exit time 2	Exit time that will be used for all zones designated as delay 2
Segment 5	Reserved	
Segment 6	Reserved	

LOCATION 95 - ACCOUNT CODE FOR PARTITION 4 (6 segments, numerical data)

The account code that is sent when reporting partition 4 is programmed in location 95. If location 95 is left unprogrammed (all "10") then the account code corresponding to the phone number that is dialled will be used. If the account code is less than six digits, program a "10" in the segment immediately after the last digit of the account code. If the account code is 6 digits long, program all 6 segments.

LOCATION 96 - PARTITION 4 FEATURE AND REPORTING SELECTIONS (5 segments, feature selection data)

Location 96 is used to enable certain features that the user can access or see from the keypad of the system. In addition, certain communicator reports are enabled in this location. Each of these features can be enabled by partition. This location contains 5 segments, with eight possible features per segment. Refer to location 23 for the feature selections. If all the segments are blank (nothing enabled), the features for partition 1 will be used.

LOCATION 97 - PARTITION 4 ENTRY EXIT TIMERS (6 segments, numerical data)

Location 97 is used to enter the entry and exit times in seconds. There are 2 separate entry and exit times. Valid entries are 10-255 seconds. If all the segments are "0", the entry and exit times for partition 1 will be used.

Segment 1	Entry time 1	Entry time that will be used when a delay 1 zone type initiates an entry delay
Segment 2	Exit time 1	Exit time that will be used for all zones designated as delay 1
Segment 3	Entry time 2	Entry time that will be used when a delay 2 zone type initiates an entry delay
Segment 4	Exit time 2	Exit time that will be used for all zones designated as delay 2
Segment 5	Reserved	
Segment 6	Reserved	

Programming zone configuration groups

Locations 110-169 are used to change the zone configurations as listed in the table on page 104. These locations are considered as advanced programming, and they should only be changed if you have a thorough understanding of the operation of each bit.

LOCATION 110 - CONFIGURATION GROUP 1 ALARM EVENT CODE (1 segment, numerical data)

Location 110 contains the event code that is sent for a Contact ID or SIA report. The desired event code should be chosen from the Table 38 or Table 39 in Appendix 1. The zone ID will be the zone that is in alarm.

This location is not used for slow speed formats (like 4+2 and 3+1). This location may also contain the alarm report code for the Robofon format (value 00-99).

LOCATION 111 - CONFIGURATION GROUP 1 CHARACTERISTIC SELECT (5 segments, feature selection data)

Segment 1	1 =	**Fire** (turn on if this is a fire zone)
	2 =	**24 hour** (turn on for non-fire 24 hour zones)
	3 =	**Keyswitch** zone (normally open switch)
	4 =	**Follower** (turn on for burglary zones that are Instant during non-entry times)
	5 =	**Delay 1** zone (follows timer 1 Entry and Exit times)
	6 =	**Delay 2** zone (follows timer 2 Entry and Exit times)
	7 =	**Interior** (turn on if this zone should Automatically Bypass or Bypass for Stay Arming)
	8 =	**Local only** (turn on if this zone should not be reported) **Remark: for a maintained keyswitch (ON/OFF), program both "keyswitch" and "local"**
Segment 2	1 =	On: if configuration group will **beep the keypad** for alarm
	2 =	On: if configuration group will sound the **yelping siren** for alarm
	3 =	On: if configuration group will sound the **steady siren** for alarm
	4 =	On: if configuration group will **chime**
	5 =	On: if configuration group can be **bypassed**
	6 =	On: if configuration group is included in the **group shunt**

	7 =	On: if configuration group is **force armable**
	8 =	On: if configuration group is **entry guard**
Segment 3	1 =	On: enables **Fast Loop** Response. (50mS) - Off= 500mS
	2 =	On: enables Double **End Of Line Tamper** zone. (Mainly used for tamper on wireless zones)
	3 =	On: enables **Trouble Reporting** zone. (Day zone and Fire zones)
	4 =	On: if configuration group is a **Cross Zone**
	5 =	On: enables **Dialer Delay** zone. (See location 40)
	6 =	On: if configuration group will use **swinger shutdown**. (See location 38)
	7 =	On: enables **Restore reporting**
	8 =	On: enables **Listen-In**. (See location 40)
Segment 4	1 =	On: enables zone activity monitor
	2 =	On: enables end of line resistor defeat on non-fire/non-keyswitch zones
	3 =	On : enables zone to act as request to exit input / disables for alarm activation
	4 =	On: enables zone to act as access entry point (Door Shunt) (*)
	5 =	Reserved
	6 =	Reserved
	7 =	Reserved
	8 =	Reserved
Segment 5	1-8	Reserved

(*) Note: Refer to NX-17xx door control installer manual. Do not enable this segment unless configured with Door Control.

LOCATION 112 - CONFIGURATION GROUP 2 ALARM EVENT CODE (1 segment, numerical data)

Location 112 contains the event code that is sent for a Contact ID or SIA report. The desired event code should be chosen from the Table 38 or Table 39 in Appendix 1. The zone ID will be the zone that is in alarm.

This location is not used for slow speed formats (like 4+2 and 3+1). This location may also contain the alarm report code for the Robofon format (value 00-99).

LOCATION 113 - CONFIGURATION GROUP 2 CHARACTERISTIC SELECT (5 segments, feature selection data)

Use the “Configuration Group Characteristic Selections” described in Location 111.

LOCATION 114 - CONFIGURATION GROUP 3 ALARM EVENT CODE (1 segment, numerical data)

Location 114 contains the event code that is sent for a Contact ID or SIA report. The desired event code should be chosen from the Table 38 or Table 39 in Appendix 1. The zone ID will be the zone that is in alarm.

This location is not used for slow speed formats (like 4+2 and 3+1). This location may also contain the alarm report code for the Robofon format (value 00-99).

LOCATION 115 - CONFIGURATION GROUP 3 CHARACTERISTIC SELECT (5 segments, feature selection data)

Use the “Configuration Group Characteristic Selections” described in Location 111.

LOCATION 116 - CONFIGURATION GROUP 4 ALARM EVENT CODE (1 segment, numerical data)

Location 116 contains the event code that is sent for a Contact ID or SIA report. The desired event code should be chosen from the Table 38 or Table 39 in Appendix 1. The zone ID will be the zone that is in alarm. This location is not used for slow speed formats (like 4+2 and 3+1). This location may also contain the alarm report code for the Robofon format (value 00-99).

LOCATION 117 - CONFIGURATION GROUP 4 CHARACTERISTIC SELECT (5 segments, feature selection data)

Use the “Configuration Group Characteristic Selections” described in Location 111.

LOCATION 118 - CONFIGURATION GROUP 5 ALARM EVENT CODE (1 segment, numerical data)

Location 118 contains the event code that is sent for a Contact ID or SIA report. The desired event code should be chosen from the Table 38 or Table 39 in Appendix 1. The zone ID will be the zone that is in alarm.

This location is not used for slow speed formats (like 4+2 and 3+1). This location may also contain the alarm report code for the Robofon format (value 00-99).

LOCATION 119 - CONFIGURATION GROUP 5 CHARACTERISTIC SELECT (5 segments, feature selection data)

Use the “Configuration Group Characteristic Selections” described in Location 111.

LOCATION 120 - CONFIGURATION GROUP 6 ALARM EVENT CODE (1 segment, numerical data)

Location 120 contains the event code that is sent for a Contact ID or SIA report. The desired event code should be chosen from the Table 38 or Table 39 in Appendix 1. The zone ID will be the zone that is in alarm.

This location is not used for slow speed formats (like 4+2 and 3+1). This location may also contain the alarm report code for the Robofon format (value 00-99).

LOCATION 121 - CONFIGURATION GROUP 6 CHARACTERISTIC SELECT (5 segments, feature selection data)

Use the “Configuration Group Characteristic Selections” described in Location 111.

LOCATION 122 - CONFIGURATION GROUP 7 ALARM EVENT CODE (1 segment, numerical data)

Location 122 contains the event code that is sent for a Contact ID or SIA report. The desired event code should be chosen from the Table 38 or Table 39 in Appendix 1. The zone ID will be the zone that is in alarm.

This location is not used for slow speed formats (like 4+2 and 3+1). This location may also contain the alarm report code for the Robofon format (value 00-99).

LOCATION 123 - CONFIGURATION GROUP 7 CHARACTERISTIC SELECT (5 segments, feature selection data)

Use the “Configuration Group Characteristic Selections” described in Location 111.

LOCATION 124 - CONFIGURATION GROUP 8 ALARM EVENT CODE (1 segment, numerical data)

Location 124 contains the event code that is sent for a Contact ID or SIA report. The desired event code should be chosen from the Table 38 or Table 39 in Appendix 1. The zone ID will be the zone that is in alarm.

This location is not used for slow speed formats (like 4+2 and 3+1). This location may also contain the alarm report code for the Robofon format (value 00-99).

LOCATION 125 - CONFIGURATION GROUP 8 CHARACTERISTIC SELECT (5 segments, feature selection data)

Use the “Configuration Group Characteristic Selections” described in Location 111.

LOCATION 126 - CONFIGURATION GROUP 9 ALARM EVENT CODE (1 segment, numerical data)

Location 126 contains the event code that is sent for a Contact ID or SIA report. The desired event code should be chosen from the Table 38 or Table 39 in Appendix 1. The zone ID will be the zone that is in alarm.

This location is not used for slow speed formats (like 4+2 and 3+1). This location may also contain the alarm report code for the Robofon format (value 00-99).

LOCATION 127 - CONFIGURATION GROUP 9 CHARACTERISTIC SELECT (5 segments, feature selection data)

Use the "Configuration Group Characteristic Selections" described in Location 111.

LOCATION 128 - CONFIGURATION GROUP 10 ALARM EVENT CODE (1 segment, numerical data)

Location 128 contains the event code that is sent for a Contact ID or SIA report. The desired event code should be chosen from the Table 38 or Table 39 in Appendix 1. The zone ID will be the zone that is in alarm.

This location is not used for slow speed formats (like 4+2 and 3+1). This location may also contain the alarm report code for the Robofon format (value 00-99).

LOCATION 129 - CONFIGURATION GROUP 10 CHARACTERISTIC SELECT (5 segments, feature selection data)

Use the "Configuration Group Characteristic Selections" described in Location 111.

LOCATION 130 - CONFIGURATION GROUP 11 ALARM EVENT CODE (1 segment, numerical data)

Location 130 contains the event code that is sent for a Contact ID or SIA report. The desired event code should be chosen from the Table 38 or Table 39 in Appendix 1. The zone ID will be the zone that is in alarm.

This location is not used for slow speed formats (like 4+2 and 3+1). This location may also contain the alarm report code for the Robofon format (value 00-99).

LOCATION 131 - CONFIGURATION GROUP 11 CHARACTERISTIC SELECT (5 segments, feature selection data)

Use the “Configuration Group Characteristic Selections” described in Location 111.

LOCATION 132 - CONFIGURATION GROUP 12 ALARM EVENT CODE (1 segment, numerical data)

Location 132 contains the event code that is sent for a Contact ID or SIA report. The desired event code should be chosen from the Table 38 or Table 39 in Appendix 1. The zone ID will be the zone that is in alarm.

This location is not used for slow speed formats (like 4+2 and 3+1). This location may also contain the alarm report code for the Robofon format (value 00-99).

LOCATION 133 - CONFIGURATION GROUP 12 CHARACTERISTIC SELECT (5 segments, feature selection data)

Use the “Configuration Group Characteristic Selections” described in Location 111.

LOCATION 134 - CONFIGURATION GROUP 13 ALARM EVENT CODE (1 segment, numerical data)

Location 134 contains the event code that is sent for a Contact ID or SIA report. The desired event code should be chosen from the Table 38 or Table 39 in Appendix 1. The zone ID will be the zone that is in alarm.

This location is not used for slow speed formats (like 4+2 and 3+1). This location may also contain the alarm report code for the Robofon format (value 00-99).

LOCATION 135 - CONFIGURATION GROUP 13 CHARACTERISTIC SELECT (5 segments, feature selection data)

Use the “Configuration Group Characteristic Selections” described in Location 111.

LOCATION 136 - CONFIGURATION GROUP 14 ALARM EVENT CODE (1 segment, numerical data)

Location 136 contains the event code that is sent for a Contact ID or SIA report. The desired event code should be chosen from the Table 38 or Table 39 in Appendix 1. The zone ID will be the zone that is in alarm.

This location is not used for slow speed formats (like 4+2 and 3+1). This location may also contain the alarm report code for the Robofon format (value 00-99).

LOCATION 137 - CONFIGURATION GROUP 14 CHARACTERISTIC SELECT (5 segments, feature selection data)

Use the “Configuration Group Characteristic Selections” described in Location 111.

LOCATION 138 - CONFIGURATION GROUP 15 ALARM EVENT CODE (1 segment, numerical data)

Location 138 contains the event code that is sent for a Contact ID or SIA report. The desired event code should be chosen from the Table 38 or Table 39 in Appendix 1. The zone ID will be the zone that is in alarm.

This location is not used for slow speed formats (like 4+2 and 3+1). This location may also contain the alarm report code for the Robofon format (value 00-99).

LOCATION 139 - CONFIGURATION GROUP 15 CHARACTERISTIC SELECT (5 segments, feature selection data)

Use the “Configuration Group Characteristic Selections” described in Location 111.

LOCATION 140 - CONFIGURATION GROUP 16 ALARM EVENT CODE (1 segment, numerical data)

Location 140 contains the event code that is sent for a Contact ID or SIA report. The desired event code should be chosen from the Table 38 or Table 39 in Appendix 1. The zone ID will be the zone that is in alarm.

This location is not used for slow speed formats (like 4+2 and 3+1). This location may also contain the alarm report code for the Robofon format (value 00-99).

LOCATION 141 - CONFIGURATION GROUP 16 CHARACTERISTIC SELECT (5 segments, feature selection data)

Use the “Configuration Group Characteristic Selections” described in Location 111.

LOCATION 142 - CONFIGURATION GROUP 17 ALARM EVENT CODE (1 segment, numerical data)

Location 142 contains the event code that is sent for a Contact ID or SIA report. The desired event code should be chosen from the Table 38 or Table 39 in Appendix 1. The zone ID will be the zone that is in alarm.

This location is not used for slow speed formats (like 4+2 and 3+1). This location may also contain the alarm report code for the Robofon format (value 00-99).

LOCATION 143 - CONFIGURATION GROUP 17 CHARACTERISTIC SELECT (5 segments, feature selection data)

Use the “Configuration Group Characteristic Selections” described in Location 111.

LOCATION 144 - CONFIGURATION GROUP 18 ALARM EVENT CODE (1 segment, numerical data)

Location 144 contains the event code that is sent for a Contact ID or SIA report. The desired event code should be chosen from the Table 38 or Table 39 in Appendix 1. The zone ID will be the zone that is in alarm.

This location is not used for slow speed formats (like 4+2 and 3+1). This location may also contain the alarm report code for the Robofon format (value 00-99).

LOCATION 145 - CONFIGURATION GROUP 18 CHARACTERISTIC SELECT (5 segments, feature selection data)

Use the “Configuration Group Characteristic Selections” described in Location 111.

LOCATION 146 - CONFIGURATION GROUP 19 ALARM EVENT CODE (1 segment, numerical data)

Location 146 contains the event code that is sent for a Contact ID or SIA report. The desired event code should be chosen from the Table 38 or Table 39 in Appendix 1. The zone ID will be the zone that is in alarm.

This location is not used for slow speed formats (like 4+2 and 3+1). This location may also contain the alarm report code for the Robofon format (value 00-99).

LOCATION 147 - CONFIGURATION GROUP 19 CHARACTERISTIC SELECT (5 segments, feature selection data)

Use the "Configuration Group Characteristic Selections" described in Location 111.

LOCATION 148 - CONFIGURATION GROUP 20 ALARM EVENT CODE (1 segment, numerical data)

Location 148 contains the event code that is sent for a Contact ID or SIA report. The desired event code should be chosen from the Table 38 or Table 39 in Appendix 1. The zone ID will be the zone that is in alarm.

This location is not used for slow speed formats (like 4+2 and 3+1). This location may also contain the alarm report code for the Robofon format (value 00-99).

LOCATION 149 - CONFIGURATION GROUP 20 CHARACTERISTIC SELECT (5 segments, feature selection data)

Use the "Configuration Group Characteristic Selections" described in Location 111.

LOCATION 150 - CONFIGURATION GROUP 21 ALARM EVENT CODE (1 segment, numerical data)

Location 150 contains the event code that is sent for a Contact ID or SIA report. The desired event code should be chosen from the Table 38 or Table 39 in Appendix 1. The zone ID will be the zone that is in alarm.

This location is not used for slow speed formats (like 4+2 and 3+1). This location may also contain the alarm report code for the Robofon format (value 00-99).

LOCATION 151 - CONFIGURATION GROUP 21 CHARACTERISTIC SELECT (5 segments, feature selection data)

Use the "Configuration Group Characteristic Selections" described in Location 111.

LOCATION 152 - CONFIGURATION GROUP 22 ALARM EVENT CODE (1 segment, numerical data)

Location 152 contains the event code that is sent for a Contact ID or SIA report. The desired event code should be chosen from the Table 38 or Table 39 in Appendix 1. The zone ID will be the zone that is in alarm.

This location is not used for slow speed formats (like 4+2 and 3+1). This location may also contain the alarm report code for the Robofon format (value 00-99).

LOCATION 153 - CONFIGURATION GROUP 22 CHARACTERISTIC SELECT (5 segments, feature selection data)

Use the “Configuration Group Characteristic Selections” described in Location 111.

LOCATION 154 - CONFIGURATION GROUP 23 ALARM EVENT CODE (1 segment, numerical data)

Location 154 contains the event code that is sent for a Contact ID or SIA report. The desired event code should be chosen from the Table 38 or Table 39 in Appendix 1. The zone ID will be the zone that is in alarm.

This location is not used for slow speed formats (like 4+2 and 3+1). This location may also contain the alarm report code for the Robofon format (value 00-99).

LOCATION 155 - CONFIGURATION GROUP 23 CHARACTERISTIC SELECT (5 segments, feature selection data)

Use the “Configuration Group Characteristic Selections” described in Location 111.

LOCATION 156 - CONFIGURATION GROUP 24 ALARM EVENT CODE (1 segment, numerical data)

Location 156 contains the event code that is sent for a Contact ID or SIA report. The desired event code should be chosen from the Table 38 or Table 39 in Appendix 1. The zone ID will be the zone that is in alarm.

This location is not used for slow speed formats (like 4+2 and 3+1). This location may also contain the alarm report code for the Robofon format (value 00-99).

LOCATION 157 - CONFIGURATION GROUP 24 CHARACTERISTIC SELECT (5 segments, feature selection data)

Use the “Configuration Group Characteristic Selections” described in Location 111.

LOCATION 158 - CONFIGURATION GROUP 25 ALARM EVENT CODE (1 segment, numerical data)

Location 158 contains the event code that is sent for a Contact ID or SIA report. The desired event code should be chosen from the Table 38 or Table 39 in Appendix 1. The zone ID will be the zone that is in alarm.

This location is not used for slow speed formats (like 4+2 and 3+1). This location may also contain the alarm report code for the Robofon format (value 00-99).

LOCATION 159 - CONFIGURATION GROUP 25 CHARACTERISTIC SELECT (5 segments, feature selection data)

Use the “Configuration Group Characteristic Selections” described in Location 111.

LOCATION 160 - CONFIGURATION GROUP 26 ALARM EVENT CODE (1 segment, numerical data)

Location 160 contains the event code that is sent for a Contact ID or SIA report. The desired event code should be chosen from the Table 38 or Table 39 in Appendix 1. The zone ID will be the zone that is in alarm.

This location is not used for slow speed formats (like 4+2 and 3+1). This location may also contain the alarm report code for the Robofon format (value 00-99).

LOCATION 161 - CONFIGURATION GROUP 26 CHARACTERISTIC SELECT (5 segments, feature selection data)

Use the “Configuration Group Characteristic Selections” described in Location 111.

LOCATION 162 - CONFIGURATION GROUP 27 ALARM EVENT CODE (1 segment, numerical data)

Location 162 contains the event code that is sent for a Contact ID or SIA report. The desired event code should be chosen from the Table 38 or Table 39 in Appendix 1. The zone ID will be the zone that is in alarm.

This location is not used for slow speed formats (like 4+2 and 3+1). This location may also contain the alarm report code for the Robofon format (value 00-99).

LOCATION 163 - CONFIGURATION GROUP 27 CHARACTERISTIC SELECT (5 segments, feature selection data)

Use the “Configuration Group Characteristic Selections” described in Location 111.

LOCATION 164 - CONFIGURATION GROUP 28 ALARM EVENT CODE (1 segment, numerical data)

Location 164 contains the event code that is sent for a Contact ID or SIA report. The desired event code should be chosen from the Table 38 or Table 39 in Appendix 1. The zone ID will be the zone that is in alarm.

This location is not used for slow speed formats (like 4+2 and 3+1). This location may also contain the alarm report code for the Robofon format (value 00-99).

LOCATION 165 - CONFIGURATION GROUP 28 CHARACTERISTIC SELECT (5 segments, feature selection data)

Use the “Configuration Group Characteristic Selections” described in Location 111.

LOCATION 166 - CONFIGURATION GROUP 29 ALARM EVENT CODE (1 segment, numerical data)

Location 166 contains the event code that is sent for a Contact ID or SIA report. The desired event code should be chosen from the Table 38 or Table 39 in Appendix 1. The zone ID will be the zone that is in alarm.

This location is not used for slow speed formats (like 4+2 and 3+1). This location may also contain the alarm report code for the Robofon format (value 00-99).

LOCATION 167 - CONFIGURATION GROUP 29 CHARACTERISTIC SELECT (5 segments, feature selection data)

Use the “Configuration Group Characteristic Selections” described in Location 111.

LOCATION 168 - CONFIGURATION GROUP 30 ALARM EVENT CODE (1 segment, numerical data)

Location 168 contains the event code that is sent for a Contact ID or SIA report. The desired event code should be chosen from the Table 38 or Table 39 in Appendix 1. The zone ID will be the zone that is in alarm.

This location is not used for slow speed formats (like 4+2 and 3+1). This location may also contain the alarm report code for the Robofon format (value 00-99).

LOCATION 169 - CONFIGURATION GROUP 30 CHARACTERISTIC SELECT (5 segments, feature selection data)

Use the "Configuration Group Characteristic Selections" described in Location 111.

LOCATIONS 170-205 - RESERVED

LOCATION 206 – AUTO DISARM DAY SELECTOR (4 segments, feature selection data)

Location 206 selects which days each partition will auto disarm. Segment 1 is for partition 1 and segment 4 is for partition 4.

Segment 1-4

1 = Auto disarming on Sunday
2 = Auto disarming on Monday
3 = Auto disarming on Tuesday
4 = Auto disarming on Wednesday
5 = Auto disarming on Thursday
6 = Auto disarming on Friday
7 = Auto disarming on Saturday
8 = Reserved

LOCATIONS 207-211 - RESERVED

LOCATION 212 – PROGRAMMING THE LCD KEYPAD ADDRESS (1 segment, numerical data)

The system requires at least 1 LCD keypad. The panel will get the zone descriptions from the first language from that LCD keypad which has the address defined in location 212. It is recommended that it will be placed in location 1 keypad 1. This will allow location 212 to be left at the factory default. If the LCD keypad is selected as something other than partition 1 / keypad 1, program the appropriate address in location 212. Select the address from the location chart.

Keypad	Part 1	Part 2	Part 3	Part 4
1	192	193	194	195
2	200	201	202	203
3	208	209	210	211
4	216	217	218	219

LOCATION 213 – PROGRAMMING THE COUNTRY CODE (1 segment, numerical data)

The NetworX system has the ability to set different "country codes". Each country code has specific default settings. Before start programming the system, it is important to select the country code that is required (see table below). Once the country code has been selected, it will remain set, even after an installer reset. When changing the country code during programming, all existing programming will be cleared to the defaults for that country.

Code	Country
0	No country (factory setting)
1	Holland
2	Belgium / Poland
3	Sweden
4	Italy
5	Spain
6	Greece
7	South Africa
8	Israel
9	Spain (PRSGR)
10	Turkey
11	France
17	Turkey Pronet
50	US

NetworX V3 location-programming worksheets

Factory defaults for NetworX V3 are in ***bold italic*** text. These defaults are for the country code 2 (Belgium/Poland).

Loc	Description	Default	Programming data
0	PHONE 1	***14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14***	
1	PHONE 1, ACCOUNT CODE	***10 – 10 – 10 – 10 – 10 – 10***	
2	PHONE 1, REPORTING FORMAT	***0***	
3	PHONE 1, DIAL ATTEMPTS BACKUP CONTROL	***8*** ***0***	

4	PHONE 1, SELECTING EVENTS TO REPORT TO PHONE 1			
	Segment 1 (Circle Numbers To Program)		**Segment 2** (Circle Numbers To Program)	
	1	***Alarms***	1	***Tampers (zones and box)***
	2	***Open/Close***	2	***Short Circuit***
	3	***Bypass***	3	***Sensor Lost***
	4	***Zone Trouble***	4	***Sensor Low Battery***
	5	***Power Trouble (AC Failure or Low Batt.)***	5	***Expander Trouble (incl. keypad)***
	6	***Siren & Telephone Fault***	6	***Failure To Communicate***
	7	***Test Reports***	7	***Alarm Restore***
	8	***Program, Download, & Log Full***	8	***Tamper Restore***

5	PHONE 1, SELECTING WHICH PARTITIONS REPORT TO PHONE 1	
	Segment 1 (Circle Numbers To Program)	
	1	Partition 1
	2	Partition 2
	3	Partition 3
	4	Partition 4

6	PHONE 2	***14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14***	
7	PHONE 2, ACCOUNT CODE	***10 – 10 – 10 – 10 – 10 – 10***	
8	PHONE 2, REPORTING FORMAT	***0***	
9	PHONE 2, DIAL ATTEMPTS BACKUP CONTROL	***8*** ***0***	

10	PHONE 2, SELECTING EVENTS TO REPORT TO PHONE 2			
	Segment 1 (Circle Numbers To Program)		**Segment 2** (Circle Numbers To Program)	
	1	Alarms	1	Tampers (zones and box)
	2	Open/Close	2	Short Circuit
	3	Bypass	3	Sensor Lost
	4	Zone Trouble	4	Sensor Low Battery
	5	Power Trouble (AC Failure or Low Batt.)	5	Expander Trouble (incl. keypad)
	6	Siren & Telephone Fault	6	Failure To Communicate
	7	Test Reports	7	Alarm Restore
	8	Program, Download, & Log Full	8	Tamper Restore

11	PHONE 2, SELECTING WHICH PARTITIONS REPORT TO PHONE 2	
	Segment 1 (Circle Numbers To Program)	
	1	Partition 1

2	Partition 2	
3	Partition 3	
4	Partition 4	

12	PHONE 3	***14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14***	
13	PHONE 3, ACCOUNT CODE	***10 – 10 – 10 – 10 – 10 – 10***	
14	PHONE 3, REPORTING FORMAT	***0***	
15	PHONE 3, DIAL ATTEMPTS BACKUP CONTROL	***8*** ***0***	

16 PHONE 3, SELECTING EVENTS TO REPORT TO PHONE 3

Segment 1 (Circle Numbers To Program)		**Segment 2** (Circle Numbers To Program)	
1	Alarms	1	Tampers (zones and box)
2	Open/Close	2	Short Circuit
3	Bypass	3	Sensor Lost
4	Zone Trouble	4	Sensor Low Battery
5	Power Trouble (AC Failure or Low Batt.)	5	Expander Trouble (incl. keypad)
6	Siren & Telephone Fault	6	Failure To Communicate
7	Test Reports	7	Alarm Restore
8	Program, Download, & Log Full	8	Tamper Restore

17 PHONE 3, SELECTING WHICH PARTITIONS REPORT TO PHONE 3

Segment 1 (Circle Numbers To Program)	
1	Partition 1
2	Partition 2
3	Partition 3
4	Partition 4

18 FORMAT OVERRIDE

Segment 1 (Circle Numbers To Program)		**Segment 2** (Circle Numbers To Program)	
1	On = 1800hz transmit; Off = 1900hz	1	On = pager format (no handshake required)
2	On = 2300hz handshake; Off = 1400hz	2	On = 1400/2300 handshake
3	On =checksum parity; Off = double round par.	3	Reserved
4	On = 2 digit event code; Off = 1 digit code	4	Reserved
5	On = extended reporting; Off =non-extended	5	On = Contact ID
6	Reserved	6	On = SIA
7	On = 20 PPS; Off = 10 or 40 PPS	7	On = 3 digit event code
8	On = 10 PPS; Off = 20 or 40 PPS	8	On = DTMF

	Segment 3 RESERVED		
	Segment 4 INTER-DIGIT TIME	***0-0-0-0***	

19	DOWNLOAD ACCESS CODE	***8-4-8-0-0-0-0-0***	
20	RINGS TO ANSWER DOWNLOAD	***8***	

21 DOWNLOAD CONTROL

Segment 1 (Circle Numbers To Program)	
1	Enables two-call answering machine defeat

2	Reserved	
3	Requires callback before downloading	
4	Shutdown control panel	
5	Lock out local programming	
6	Lock out communicator programming	
7	Lock out download section	
8	Enables callback at autotest interval	

22	CALLBACK PHONE NUMBER	***14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14***	

23 PARTITION 1, FEATURE SELECTION

Segment 1		Segment 2		Segment 3	
1	Quick Arm	1	LED extinguish enable	1	Open/Close
2	Re-Exit	2	Require user code for bypassing zones	***2***	***Bypass***
3	Auto Bypass (interior)	3	Bypass sounder alert	***3***	***Restore***
4	Silent Panic	***4***	***AC power/ low battery sounder alert***	***4***	***Trouble***
5	Audible Panic	5	Enables bypass toggle	***5***	***Tamper***
6	Auxiliary 1	6	Enables silent auto arm	***6***	***Cancel***
7	Auxiliary 2	7	Enables automatic instant (entry/exit)	7	Recent Closing
8	***Multi Keypress Tamper***	8	Final set door	8	Exit Error

Segment 4		Segment 5	
1	Late to close/early to open	1	Disables auto bypassing of force armable zones
2	Auto arm in stay mode	2	Reserved
3	Enables instant night	3	Reserved
4	Tamper when sensor lost if armed	4	Reserved
5	Enables instant stay toggle	5	Reserved
6	***Arming with tamper mem./ comm. failure***	6	Reserved
7	Arming with battery trouble	7	Reserved
8	Keyswitch zone arms in stay mode	8	Reserved

24 ENTRY/EXIT TIMERS

Segment 1 (Entry Time 1)	***30***	
Segment 2 (Exit Time 1)	***60***	
Segment 3 (Entry Time 2)	***30***	
Segment 4 (Exit Time 2)	***60***	
Reserved	***0***	
Reserved	***0***	

25	ZONES 1-8, CONFIGURATION GROUPS	***3-5-6-6-6-6-6-6***	

26 ZONES 1-8, PARTITION SELECTION (Segment 1=Zone 1 thru Segment 8=Zone 8)

Segments	1	2	3	4	5	6	7	8
Partition 1	***1***	***1***	***1***	***1***	***1***	***1***	***1***	***1***
Partition 2	2	2	2	2	2	2	2	2
Partition 3	3	3	3	3	3	3	3	3
Partition 4	4	4	4	4	4	4	4	4

27	ZONES 9-16, CONFIGURATION GROUPS					***6-6-6-6-6-6-6-6***			
28	ZONES 9-16, PARTITION SELECTION (Segment 1=Zone 9 thru Segment 8=Zone 16)								
	Segments	1	2	3	4	5	6	7	8
	Partition 1	***1***	***1***	***1***	***1***	***1***	***1***	***1***	***1***
	Partition 2	2	2	2	2	2	2	2	2
	Partition 3	3	3	3	3	3	3	3	3
	Partition 4	4	4	4	4	4	4	4	4
29	ZONES 17-24, CONFIGURATION GROUPS					***6-6-6-6-6-6-6-6***			
30	ZONES 17-24, PARTITION SELECTION (Segment 1=Zone 17 thru Segment 8=Zone 24)								
	Segments	1	2	3	4	5	6	7	8
	Partition 1	***1***	***1***	***1***	***1***	***1***	***1***	***1***	***1***
	Partition 2	2	2	2	2	2	2	2	2
	Partition 3	3	3	3	3	3	3	3	3
	Partition 4	4	4	4	4	4	4	4	4
31	ZONES 25-32, CONFIGURATION GROUPS					***6-6-6-6-6-6-6-6***			
32	ZONES 25-32, PARTITION SELECTION (Segment 1=Zone 25 thru Segment 8=Zone 32)								
	Segments	1	2	3	4	5	6	7	8
	Partition 1	***1***	***1***	***1***	***1***	***1***	***1***	***1***	***1***
	Partition 2	2	2	2	2	2	2	2	2
	Partition 3	3	3	3	3	3	3	3	3
	Partition 4	4	4	4	4	4	4	4	4
33	ZONES 33-40, CONFIGURATION GROUPS					***6-6-6-6-6-6-6-6***			
34	ZONES 33-40, PARTITION SELECTION (Segment 1=Zone 33 thru Segment 8=Zone 40)								
	Segments	1	2	3	4	5	6	7	8
	Partition 1	***1***	***1***	***1***	***1***	***1***	***1***	***1***	***1***
	Partition 2	2	2	2	2	2	2	2	2
	Partition 3	3	3	3	3	3	3	3	3
	Partition 4	4	4	4	4	4	4	4	4
35	ZONES 41-48, CONFIGURATION GROUPS					***6-6-6-6-6-6-6-6***			
36	ZONES 41-48, PARTITION SELECTION (Segment 1=Zone 41 thru Segment 8=Zone 48)								
	Segments	1	2	3	4	5	6	7	8
	Partition 1	***1***	***1***	***1***	***1***	***1***	***1***	***1***	***1***
	Partition 2	2	2	2	2	2	2	2	2
	Partition 3	3	3	3	3	3	3	3	3
	Partition 4	4	4	4	4	4	4	4	4

37	SIREN AND SYSTEM SUPERVISION	
	Segment 1 (Circle Numbers To Program)	
	1	***Siren sounds for telephone line cut while armed (BELL output and wireless sirens)***
	2	Siren sounds for telephone line cut while disarmed (BELL output and wireless sirens)
	3	Siren blast at arming (pulse) (BELL output: YES; wireless sirens: NO)
	4	Siren blast at exit delay expiration (pulse) (BELL output: YES; wireless sirens: NO)
	5	Siren blast at closing kissoff (pulse)
	6	Siren sounds during a cross zone verification time
	7	***Siren sounds for a tamper***
	8	Siren blast once for keyswitch arming, twice for disarming (BELL output: YES; wireless sirens: NO)
	Segment 2 (Circle Numbers To Program)	
	1	Convert siren driver to voltage out
	2	Siren sounds for expander trouble (BELL output: YES; wireless sirens: NO)
	3	Zones to always restore
	4	Dynamic battery test performed upon arming

	5	***Battery missing test performed every 12 seconds***
	6	***Manual bell test performed during self-test function (BELL output, I/O and relays)***
	7	Manual communicator test performed during self-test function
	8	**Box tamper enabled**
	Segment 3 (Circle Numbers To Program)	
	1	***Box Tamper report enabled***
	2	***AC Fail report enabled***
	3	***Low Battery report enabled***
	4	***Auxiliary power overcurrent report enabled***
	5	***Siren supervision report enabled***
	6	***Restore Telephone Line Cut report enabled***
	7	A+B alarm
	8	***Expander trouble report enabled***
	Segment 4 (Circle Numbers To Program)	
	1	***Failure To Communicate report enabled***
	2	Log Full report enabled
	3	Autotest report enabled
	4	***Start and End Programming report enabled***
	5	***End Download report enabled***
	6	Sensor Low Battery report enabled
	7	Sensor Missing report enabled
	8	Autotest report enabled ONLY when system is armed
	Segment 5 (Circle Numbers To Program)	
	1	***Lost Clock indication enabled***
	2	Reserved
	3	Reserved
	4	Enable two trips on the same cross-zone to activate the alarm
	5	Disable bypass reports for force armed zones
	6	***Silent exit.*** This function also doubles the exit delay (for example, if exit delay is set to 30 seconds, it changes to 60 seconds).
	7	Activate “first disarm reporting” - “last arm reporting” for partitions
	8	Automatic switch summer/wintertime and vice versa
	Segment 6 (Circle Numbers To Program)	
	1	Reserved
	2	Use internal crystal for clock
	3	Enable zone activity in hours (not in days)
	4	Enable first alarm logic
	5	Enable log protection
	6	Disable Clean Me report
	7	***Siren output is steady in case of fire alarm (BELL output: YES; wireless sirens: NO)***
	8	User code will reset tamper memory

37	**Segment 7** (Circle Numbers To Program)	
	1	Dial via GSM when phone line trouble (only when GSM module is enrolled)
	2	***Exit Error limited to Entry/Exit delay 1***
	1-8	Reserved

38	SWINGER COUNTDOWN COUNT	***0***	
39	KEYPAD SOUNDER CONTROL		
	Segment 1 (Circle Numbers To Program)		
	1	***Keypad sounds for Telephone Line Cut when in the Armed state***	
	2	***Keypad sounds for Telephone Line Cut when in the Disarmed state***	

	3	Keypad sounds upon AC Power Failure
	4	Keypad sounds upon Low Battery Detection
	5	Keypad sounds during Cross Zone Trip Time
	6	***Keypad sounds for Tamper Alarm***
	7	Keypad sounds for Emergency keys
	8	Keypad sounds for Expander Trouble

40	SYSTEM TIMERS			
	Segment 1	Dynamic Battery Test duration (0-30 minutes)	***0***	
	Segment 2	AC Failure report delay (0-255 minutes)	***60***	
	Segment 3	Power Up Delay (0-60 seconds)	***0***	
	Segment 4	Siren Time (1-255 minutes)	***3***	
	Segment 5	Telephone Line Cut delay (0-255 seconds)	***0***	
	Segment 6	Cross Zone Time (0-255 minutes)	***5***	
	Segment 7	Chime Time in 50 ms increments (0-255)	***5***	
	Segment 8	Dialer delay (0-255 seconds)	***0***	
	Segment 9	Fire Alarm Verification Time (120-255 seconds)	***0***	
	Segment 10	Listen-In Time (0-255 seconds)	***0***	
	Segment 11	Zone monitor timer hours/days (0-255)	***0***	
	Segment 12	Auto arming warning timer (1-255 minutes)	***1***	
	Segment 13	Auto arming retry timer (1-255 minutes)	***45***	
	Segment 14	Programming timeout (1-255 minutes) ("0"=15 minutes)	***0***	

41	USER CODE REQUIREMENTS	
	Segment 1 (Circle Numbers To Program)	
	1	Enables six digit code option. All arm/disarm/Go to program codes require six digits
	2	***Requires valid user code entry for site initiated downloading and panel initiated downloading functions***
	3	Enables Auto Cancel / Abort
	4	Reserved
	5	On: keypad shutdown mode
	6	On: user authorization to enter program mode
	7	On: codes 16 and 17 are guard codes
	8	Reserved

42	GO TO PROGRAM CODE	***9-7-1-3-0-0***	
43	GO TO PROGRAM CODE PARTITION AND AUTHORIZATION		
	Segment 1 (Circle Numbers To Program)		
	1	Reserved	
	2	Enables "Go To Program Code" as an arm only code	
	3	Enables "Go To Program Code" as an arm only code after closing	
	4	Enables "Go To Program Code" as a master arm/disarm code (can change user codes)	
	5	Enables "Go To Program Code" as an arm/disarm code	
	6	Enables "Go To Program Code" to bypass zones	
	7	Enables "Go To Program Code" opening and closing reports	
	8	Reserved	

	Segment 2 (Circle Numbers To Program)	
	1	***Enables "Go To Program Code" for partition #1.***
	2	***Enables "Go To Program Code" for partition #2.***
	3	***Enables "Go To Program Code" for partition #3.***
	4	***Enables "Go To Program Code" for partition #4.***

44	DURESS CODE	***15-15-15-15-15-15***	

45	AUXILIARY OUTPUTS 1-2 PARTITION SELECTION			
	Segments	1	2	
	Partition 1	***1***	***1***	
	Partition 2	***2***	***2***	
	Partition 3	***3***	***3***	
	Partition 4	***4***	***4***	
46	AUXILIARY OUTPUTS 1-2 SPECIAL TIMING			
	Segments		1	2
	Auxiliary output timed in minutes		1	1
	Auxiliary output to latch		2	***2***
	Auxiliary output to stop timing when user code is entered		***3***	3
	Auxiliary output to activate only between closing and opening time		4	4
	Auxiliary output to activate only between opening and closing time		5	5
	Invert auxiliary output (0 volts going to 12 volts when activated)		6	***6***
	Reserved		7	7
	Reserved		8	8
47	AUXILIARY OUTPUT 1, EVENT & TIME (relays 1)			
	Segment 1	Program the event number for output 1	***7=Each siren activation***	
	Segment 2	Program the timing for output 1	***0 sec.=follow event***	
48	AUXILIARY OUTPUT 2, EVENT & TIME (relays 2)			
	Segment 1	Program the event number for output 2	***7=Each siren activation***	
	Segment 2	Program the timing for output 1	***0 sec.=follow event***	

51	AUTOTEST CONTROL			
	Segment 1	Program a "1" if the interval is hours, or a "0" for days. Add a "2" to suppress the daily test or a "3" to suppress the hourly test	***0***	
	Segment 2	Program the autotest interval from 1-255 days or hours	***1***	
	Segment 3	Program the autotest report in 24 hour time format	***2***	
	Segment 4	Program the autotest report time, minutes after the hour	***0***	

52	OPENING TIME / AUTO DISARM TIME			
	Segment 1	Program the hour of the opening time	***8***	
	Segment 2	Program the minutes after the hour of the opening time	***0***	
53	CLOSING TIME / AUTO ARMING TIME			
	Segment 1	Program the hour of the closing time / auto arming time	***20***	

	Segment 2	Program the minutes after hour of closing / auto arming time	***0***	

54	DAYS OF THE WEEK WHEN "ARM ONLY AFTER CLOSE" WILL ARM/DISARM IN PARTITIONS 1-4				
	Segments	1	2	3	4
	Sunday	***1***	***1***	***1***	***1***
	Monday	***2***	***2***	***2***	***2***
	Tuesday	***3***	***3***	***3***	***3***
	Wednesday	***4***	***4***	***4***	***4***
	Thursday	***5***	***5***	***5***	***5***
	Friday	***6***	***6***	***6***	***6***
	Saturday	***7***	***7***	***7***	***7***
	Reserved	***8***	***8***	***8***	***8***

55	DAYS OF THE WEEK WHEN "AUTO ARMING" WILL OCCUR IN PARTITIONS 1-4				
	Segments	1	2	3	4
	Sunday	1	1	1	1
	Monday	2	2	2	2
	Tuesday	3	3	3	3
	Wednesday	4	4	4	4
	Thursday	5	5	5	5
	Friday	6	6	6	6
	Saturday	7	7	7	7
	Disable retry	8	8	8	8

56	RESTORE COMMUNICATOR CODE, SLOW SPEED FORMATS ONLY			
	Segment 1	Partition 1 restore code	***0***	
	Segment 2	Partition 2 restore code	***0***	
	Segment 3	Partition 3 restore code	***0***	
	Segment 4	Partition 4 restore code	***0***	
57	BYPASS COMMUNICATOR CODE, SLOW SPEED FORMATS ONLY			
	Segment 1	Partition 1 bypass code	***0***	
	Segment 2	Partition 2 bypass code	***0***	
	Segment 3	Partition 3 bypass code	***0***	
	Segment 4	Partition 4 bypass code	***0***	
58	TAMPER COMMUNICATOR CODE, SLOW SPEED FORMATS ONLY			
	Segment 1	Partition 1 tamper code	***0***	
	Segment 2	Partition 2 tamper code	***0***	
	Segment 3	Partition 3 tamper code	***0***	
	Segment 4	Partition 4 tamper code	***0***	
59	TROUBLE COMMUNICATOR CODE, SLOW SPEED FORMATS ONLY			
	Segment 1	Partition 1 trouble code	***0***	
	Segment 2	Partition 2 trouble code	***0***	
	Segment 3	Partition 3 trouble code	***0***	
	Segment 4	Partition 4 trouble code	***0***	
60	SENSOR LOW BATTERY COMMUNICATOR CODE, SLOW SPEED FORMATS ONLY			
	Segment 1	Partition 1 sensor low battery code	***0***	
	Segment 2	Partition 2 sensor low battery code	***0***	
	Segment 3	Partition 3 sensor low battery code	***0***	

	Segment 4	Partition 4 sensor low battery code	***0***	
61	SENSOR MISSING COMMUNICATOR CODE, SLOW SPEED FORMATS ONLY			
	Segment 1	Partition 1 sensor missing code	***0***	
	Segment 2	Partition 2 sensor missing code	***0***	
	Segment 3	Partition 3 sensor missing code	***0***	
	Segment 4	Partition 4 sensor missing code	***0***	

	COMMUNICATOR CODES FOR SLOW SPEED FORMATS ONLY	
62	DURESS	***0-0***
63	AUXILIARY 1 (fire)	***0-0***
64	AUXILIARY 2 (medical alarm)	***0-0***
65	KEYPAD PANIC	***0-0***
66	KEYPAD MULTIPLE CODE ENTRY TAMPER	***0-0***
67	BOX TAMPER / BOX TAMPER RESTORE	***0-0-0-0***
68	AC FAIL / AC RESTORE	***0-0-0-0***
69	LOW BATTERY / LOW BATTERY RESTORE	***0-0-0-0***
70	POWER SHORT / POWER SHORT RESTORE	***0-0-0-0***
71	BELL TAMPER / BELL TAMPER RESTORE	***0-0-0-0***
72	TELEPHONE LINE CUT RESTORE	***0-0-0-0***
73	Reserved	***0-0***
74	EXPANDER TROUBLE / EXPANDER TROUBLE RESTORE	***0-0-0-0***
75	FAILURE TO COMMUNICATE	***0-0***
76	LOG FULL COMMUNICATOR CODE	***0-0***
77	OPENING CODE COMMUNICATOR CODE	
	Segment 1 Opening Code for partition 1	***0***
	Segment 2 Opening Code for partition 2	***0***
	Segment 3 Opening Code for partition 3	***0***
	Segment 4 Opening Code for partition 4	***0***
78	CLOSING COMMUNICATOR CODE	
	Segment 1 Closing Code for partition 1	***0***
	Segment 2 Closing Code for partition 2	***0***
	Segment 3 Closing Code for partition 3	***0***
	Segment 4 Closing Code for partition 4	***0***
79	AUTOTEST COMMUNICATOR CODE	***0-0***
80	RECENT CLOSING AND EXIT ERROR	***0-0***
81	START PROGRAMMING / END PROGRAMMING	***0-0-0-0***
82	RESERVED / END DOWNLOAD	***0-0-0-0***
83	CANCEL COMMUNICATOR CODE	***0***
84	BUS FAULT / BUS FAULT RESTORE	***0-0-0-0***
85-87	RESERVED	

88	PARTITION 1, ACCOUNT CODE		***10-10-10-10-10-10***	
89	PARTITION 2, ACCOUNT CODE		***10-10-10-10-10-10***	
90	PARTITION 2, FEATURE SELECTION			
	Segment 1			
	1	Quick Arm		
	2	Re-Exit		
	3	Auto Bypass (interior)		
	4	Silent Panic		
	5	Audible Panic		
	Segment 2			
	1	LED extinguish enable		
	2	Require user code for bypassing zones		
	3	Bypass sounder alert		
	4	AC power/ low battery sounder alert		
	5	Enables bypass toggle		
	Segment 3			
	1	Open/Close		
	2	Bypass		
	3	Restore		
	4	Trouble		
	5	Tamper		

	6	Auxiliary 1	6	Enables silent auto arm	6	Cancel
	7	Auxiliary 2	7	Enables automatic instant (entry/exit)	7	Recent Closing
	8	Multi Keypress Tamper	8	Final set door	8	Exit Error

Segment 4		Segment 5	
1	Late to close/early to open	1	Disables auto bypassing of force armable zones
2	Auto arm in stay mode	2	Reserved
3	Enables instant night	3	Reserved
4	Tamper when sensor lost if armed	4	Reserved
5	Enables instant stay toggle	5	Reserved
6	Arming with tamper mem./ comm. failure	6	Reserved
7	Arming with battery trouble	7	Reserved
8	Keyswitch zone arms in stay mode	8	Reserved

91	ENTRY/EXIT TIMERS		
	Segment 1 (Entry Time 1)	***0***	
	Segment 2 (Exit Time 1)	***0***	
	Segment 3 (Entry Time 2)	***0***	
	Segment 4 (Exit Time 2)	***0***	
	Reserved	***0***	
	Reserved	***0***	

92	PARTITION 3, ACCOUNT CODE	***10-10-10-10-10-10***	

93	PARTITION 3, FEATURE SELECTION					
	Segment 1		**Segment 2**		**Segment 3**	
	1	Quick Arm	1	LED extinguish enable	1	Open/Close
	2	Re-Exit	2	Require user code for bypassing zones	2	Bypass
	3	Auto Bypass (interior)	3	Bypass sounder alert	3	Restore
	4	Silent Panic	4	AC power/ low battery sounder alert	4	Trouble
	5	Audible Panic	5	Enables bypass toggle	5	Tamper
	6	Auxiliary 1	6	Enables silent auto arm	6	Cancel
	7	Auxiliary 2	7	Enables automatic instant (entry/exit)	7	Recent Closing
	8	Multi Keypress Tamper	8	Final set door	8	Exit Error

Segment 4		Segment 5	
1	Late to close/early to open	1	Disables auto bypassing of force armable zones
2	Auto arm in stay mode	2	Reserved
3	Enables instant night	3	Reserved
4	Tamper when sensor lost if armed	4	Reserved
5	Enables instant stay toggle	5	Reserved
6	Arming with tamper mem./ comm. failure	6	Reserved
7	Arming with battery trouble	7	Reserved
8	Keyswitch zone arms in stay mode	8	Reserved

94	ENTRY/EXIT TIMERS		
	Segment 1 (Entry Time 1)	***0***	
	Segment 2 (Exit Time 1)	***0***	
	Segment 3 (Entry Time 2)	***0***	
	Segment 4 (Exit Time 2)	***0***	
	Reserved	***0***	
	Reserved	***0***	

95	PARTITION 4, ACCOUNT CODE	***10-10-10-10-10-10***	

96 PARTITION 4, FEATURE SELECTION

Segment 1		Segment 2		Segment 3	
1	Quick Arm	1	LED extinguish enable	1	Open/Close
2	Re-Exit	2	Require user code for bypassing zones	2	Bypass
3	Auto Bypass (interior)	3	Bypass sounder alert	3	Restore
4	Silent Panic	4	AC power/ low battery sounder alert	4	Trouble
5	Audible Panic	5	Enables bypass toggle	5	Tamper
6	Auxiliary 1	6	Enables silent auto arm	6	Cancel
7	Auxiliary 2	7	Enables automatic instant (entry/exit)	7	Recent Closing
8	Multi Keypress Tamper	8	Final set door	8	Exit Error

Segment 4		Segment 5	
1	Late to close/early to open	1	Disables auto bypassing of force armable zones
2	Auto arm in stay mode	2	Reserved
3	Enables instant night	3	Reserved
4	Tamper when sensor lost if armed	4	Reserved
5	Enables instant stay toggle	5	Reserved
6	Arming with tamper mem./ comm. failure	6	Reserved
7	Arming with battery trouble	7	Reserved
8	Keyswitch zone arms in stay mode	8	Reserved

97 ENTRY/EXIT TIMERS

Segment 1 (Entry Time 1)	***0***	
Segment 2 (Exit Time 1)	***0***	
Segment 3 (Entry Time 2)	***0***	
Segment 4 (Exit Time 2)	***0***	
Reserved	***0***	
Reserved	***0***	

110	CONFIGURATION GROUP 1 ALARM CODE	***4***	

111 CONFIGURATION GROUP 1 CHARACTERISTIC SELECT

Segment 1 (Circle Numbers To Program)			
1	Fire (enable for fire zone)	5	Delay 1 zone (enable to follow Timer 1 Entry/Exit times)
2	24 Hour (enable for non-fire 24 hour zone)	6	Delay 2 zone (enable to follow Timer 1 Entry / Exit times)
3	Keyswitch zone	7	Interior (Enable for auto bypass or stay arming)
4	Follower (enable for burglary zones that are instant during non-entry times)	8	Local Only (enable if zone is not to be reported)
Segment 2 (Circle Numbers To Program)			
1	***Keypad audible on alarm***	***5***	***Bypassable***
2	***Yelping siren on alarm***	6	Group Bypass
3	Steady siren on alarm	7	Force armable
4	Chime	8	Entry Guard
Segment 3 (Circle Numbers To Program)			
1	Fast Loop Response	***5***	***Dialer Delay zone***
2	Double End of Line Tamper zone	***6***	***Swinger zone***
3	***Trouble zone (Fire and Day zone)***	***7***	***Restore reporting***
4	Cross Zone	***8***	***Listen-In***
Segment 4 (Circle Numbers To Program)			
1	Zone activity monitor	5	Reserved
2	End of line resistor defeat	6	Reserved

	3	Zone acts as request to exit input	7	Reserved
	4	Zone acts as acces control zone	8	Reserved
	Segment 5 (Circle Numbers To Program)			
	1-8	Reserved		

Note: The defaults listed in the odd-numbered locations below represent the five segments of each of those locations. Use the five segment charts from location 111 to understand these defaults.

112	CONFIGURATION GROUP 2 ALARM EVENT CODE	***2***	
113	CONFIGURATION GROUP 2 CHARACTERISTIC SELECT	***2-125-278***	
114	CONFIGURATION GROUP 3 ALARM EVENT CODE	***7***	
115	CONFIGURATION GROUP 3 CHARACTERISTIC SELECT	***5-125-25678***	
116	CONFIGURATION GROUP 4 ALARM EVENT CODE	***5***	
117	CONFIGURATION GROUP 4 CHARACTERISTIC SELECT	***45-125-25678***	
118	CONFIGURATION GROUP 5 ALARM EVENT CODE	***5***	
119	CONFIGURATION GROUP 5 CHARACTERISTIC SELECT	***457-125-25678***	
120	CONFIGURATION GROUP 6 ALARM EVENT CODE	***4***	
121	CONFIGURATION GROUP 6 CHARACTERISTIC SELECT	***0-125-25678***	
122	CONFIGURATION GROUP 7 ALARM EVENT CODE	***0***	
123	CONFIGURATION GROUP 7 CHARACTERISTIC SELECT	***2-5-278***	
124	CONFIGURATION GROUP 8 ALARM EVENT CODE	***1***	
125	CONFIGURATION GROUP 8 CHARACTERISTIC SELECT	***1-13-378***	
126	CONFIGURATION GROUP 9 ALARM EVENT CODE	***7***	
127	CONFIGURATION GROUP 9 CHARACTERISTIC SELECT	***6-125-25678***	
128	CONFIGURATION GROUP 10 ALARM EVENT CODE	***13***	
129	CONFIGURATION GROUP 10 CHARACTERISTIC SELECT	***24-12-78***	
130	CONFIGURATION GROUP 11 ALARM EVENT CODE	***3***	
131	CONFIGURATION GROUP 11 CHARACTERISTIC SELECT	***3-0-2***	
132	CONFIGURATION GROUP 12 ALARM EVENT CODE	***5***	
133	CONFIGURATION GROUP 12 CHARACTERISTIC SELECT	***457-125-245678***	
134	CONFIGURATION GROUP 13 ALARM EVENT CODE	***4***	
135	CONFIGURATION GROUP 13 CHARACTERISTIC SELECT	***0-1258-25678***	
136	CONFIGURATION GROUP 14 ALARM EVENT CODE	***7***	
137	CONFIGURATION GROUP 14 CHARACTERISTIC SELECT	***5-1256-25678***	
138	CONFIGURATION GROUP 15 ALARM EVENT CODE	***5***	
139	CONFIGURATION GROUP 15 CHARACTERISTIC SELECT	***457-1256-25678***	
140	CONFIGURATION GROUP 16 ALARM EVENT CODE	***4***	
141	CONFIGURATION GROUP 16 CHARACTERISTIC SELECT	***0-1256-25678***	
142	CONFIGURATION GROUP 17 ALARM EVENT CODE	***3***	
143	CONFIGURATION GROUP 17 CHARACTERISTIC SELECT	***38-0-2***	
144	CONFIGURATION GROUP 18 ALARM EVENT CODE	***7***	
145	CONFIGURATION GROUP 18 CHARACTERISTIC SELECT	***5-1257-25678***	
146	CONFIGURATION GROUP 19 ALARM EVENT CODE	***7***	
147	CONFIGURATION GROUP 19 CHARACTERISTIC SELECT	***6-1257-25678***	
148	CONFIGURATION GROUP 20 ALARM EVENT CODE	***7***	
149	CONFIGURATION GROUP 20 CHARACTERISTIC SELECT	***5-1245-25678***	
150	CONFIGURATION GROUP 21 ALARM EVENT CODE	***20***	
151	CONFIGURATION GROUP 21 CHARACTERISTIC SELECT	***24-125-278***	
152	CONFIGURATION GROUP 22 ALARM EVENT CODE	***20***	
153	CONFIGURATION GROUP 22 CHARACTERISTIC SELECT	***24-5-278***	
154	CONFIGURATION GROUP 23 ALARM EVENT CODE	***5***	
155	CONFIGURATION GROUP 23 CHARACTERISTIC SELECT	***7-125-25678***	

156	CONFIGURATION GROUP 24 ALARM EVENT CODE	***4***	
157	CONFIGURATION GROUP 24 CHARACTERISTIC SELECT	***0-1245-25678***	
158	CONFIGURATION GROUP 25 ALARM EVENT CODE	***5***	
159	CONFIGURATION GROUP 25 CHARACTERISTIC SELECT	***45-1245-25678***	
160	CONFIGURATION GROUP 26 ALARM EVENT CODE	***3***	
161	CONFIGURATION GROUP 26 CHARACTERISTIC SELECT	***248-125-2***	
162	CONFIGURATION GROUP 27 ALARM EVENT CODE	***4***	
163	CONFIGURATION GROUP 27 CHARACTERISTIC SELECT	***0-1257-25678***	
164	CONFIGURATION GROUP 28 ALARM EVENT CODE	***4***	
165	CONFIGURATION GROUP 28 CHARACTERISTIC SELECT	***0-125-25678-1***	
166	CONFIGURATION GROUP 29 ALARM EVENT CODE	***4***	
167	CONFIGURATION GROUP 29 CHARACTERISTIC SELECT	***0-125-5678-2***	
168	CONFIGURATION GROUP 30 ALARM EVENT CODE	***11***	
169	CONFIGURATION GROUP 30 CHARACTERISTIC SELECT	***24-125-278***	
170-205	RESERVED	***0-0-0-0-0-0-0-0***	

206	DAYS OF THE WEEK WHEN "AUTO DISARMING" WILL OCCUR IN PARTITIONS 1-4				
	Segments	1	2	3	4
	Sunday	1	1	1	1
	Monday	2	2	2	2
	Tuesday	3	3	3	3
	Wednesday	4	4	4	4
	Thursday	5	5	5	5
	Friday	6	6	6	6
	Saturday	7	7	7	7
	Reserved	8	8	8	8

207-211	RESERVED		

212	LCD KEYPAD ADDRESS FOR XSIA ZONE DESCRIPTIONS	***192***	
213	COUNTRY CODE	***0***	

Chapter B3 Programming the NX-1048 keypad

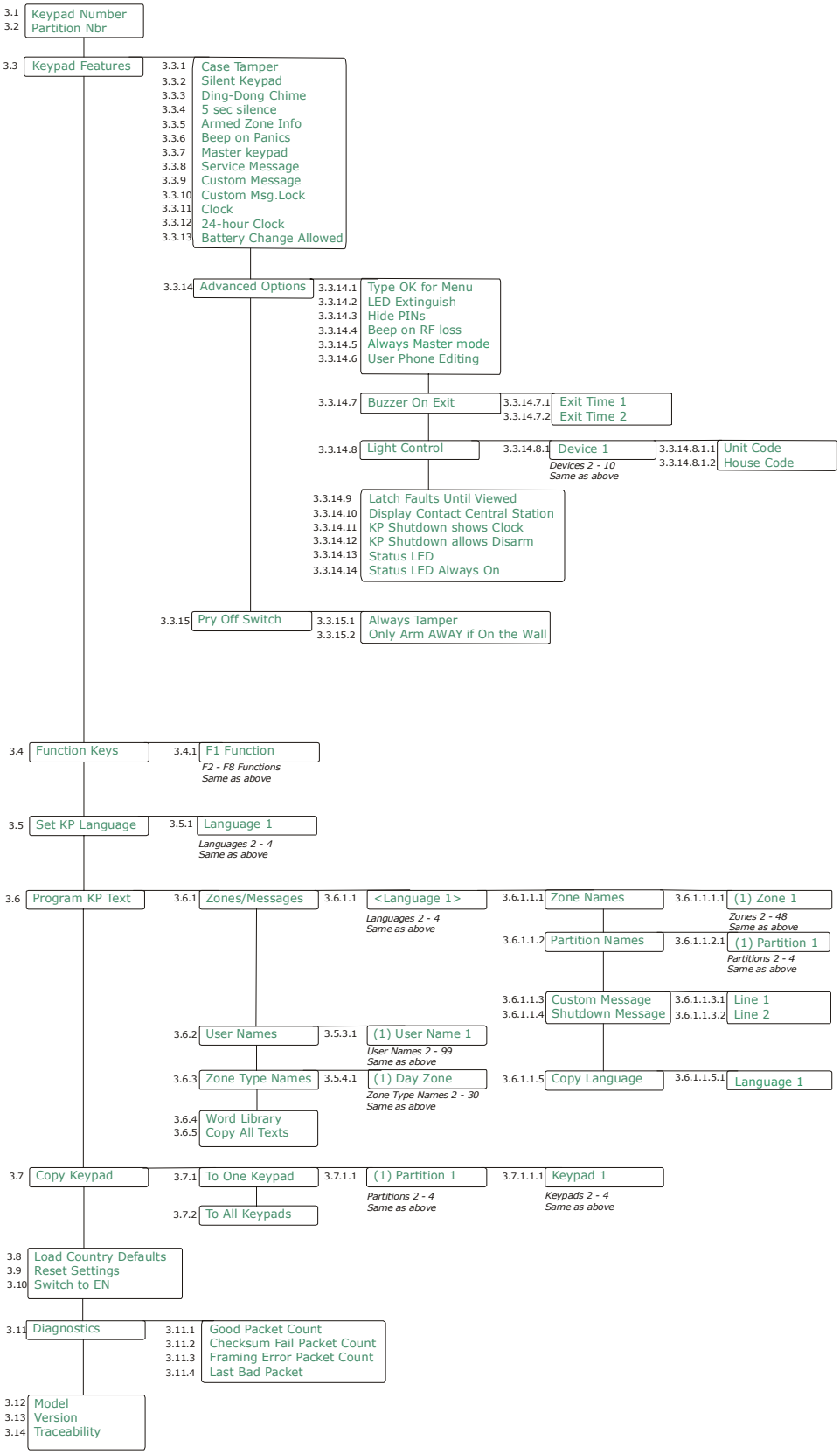
Overview

Each NX-1048 keypad has a sounder and an LCD display that displays messages in a number of possible languages.

Each NX-1048 keypad must be enrolled, defaulted to the country settings for the selected country and defaulted to the factory defaults before starting to program the system. For more information on enrolling and defaulting, see Chapter B7 *Enrolling modules*. For step-by-step instructions concerning the very first wireless keypad installation, see the *Wireless keypad learning-in* procedure section, and for instructions about installing additional wireless keypads, see the *Learning-in additional wireless keypads* section.

To program the current keypad, select *Installer Menu>This Keypad*.

Figure 23. NX-1048 keypad menu



Configuring the NX-1048 keypad features

General options

You can configure the LCD display, the keypad sounder and combination keys. The following example configures the keypad so that all codes are displayed as stars rather than in digits. It also configures the keypad sounder to beep when a wireless receiver does not report within the supervision window.

1. Navigate with the ↑↓ keys to *This Keypad>Keypad Features* and press **OK**.
2. Scroll to *Display>Hide PINs>Yes* and press **OK**.
3. The keypad beeps once to confirm the change and returns to *Hide PINs*.
4. Navigate with the ↑↓ keys to *Beep on RF loss>Yes* and press **OK**.
5. The keypad beeps once to confirm the change and returns to *Beep on RF loss*.

You can also configure the keypad to hide system status. This is a system-wide option. It causes all keypads to display a "Please Enter Your Code" prompt, power-on icon and "NOT OK to arm" icon only, after 30 seconds of keypad inactivity. There is also an option to display time and date instead of this prompt. In order to operate a blanked keypad you have to enter your user code (both in armed and disarmed state).

1. Navigate with the ↑↓ keys to *Control Panel>System Settings>Feature Select>Miscellaneous>KP Shutdown Mode* and press **OK**.
2. Scroll to *Enabled* and press **OK**.
3. The keypad beeps once to confirm the change and returns to *KP Shutdown Mode*.
4. In order to display time and date instead of the "Please Enter Your Code" prompt, navigate with the ↑↓ keys to *This Keypad>Keypad Features>Advanced Options>KP Shutdown shows Clock>Enabled* and press **OK**.
5. The keypad beeps once to confirm the change and returns to *KP Shutdown shows Clock*

There is an additional option to disarm the system directly from the blanked state, without "waking it up" first, i.e. avoiding the necessity to enter the user code twice.

1. Navigate with the ↑↓ keys to *This Keypad>Keypad Features>Advanced Options* and press **OK**.
2. Scroll to *KP Shutdown allows Disarm>Enabled* and press **OK**.
3. The keypad beeps once to confirm the change and returns to *KP Shutdown allows Disarm*.

Programming the function keys

The NX-1048 keypad has 8 function keys F1 to F8. The keys F1, F2, F7 and F8 can be configured to perform any action listed in the Table 19 *Available function key actions*. The other function keys - F3, F4, F5 and F6 - have a permanent assigned function and cannot be configured. This way you can create shortcuts for actions that otherwise require selecting a number of the user menu options or

entering codes. The way the functions actually work depends on other system settings, for example the Arm Away function works as a single-button shortcut only in the single-partition mode if the *Installer Menu>Control Panel>Partition Settings>Partition 1>Feature Select>Arming>Quick Arm* menu option was set. Some functions are assigned to particular keys by default, and can be made permanent (fixed) at the factory.

Note: When arming the system with a function key, both logs and reports show User 98 as the user who armed the system.

There are the following default key assignments:

Table 18. Default function key assignments

Key	Default function
F1	Panic Keypad
F2	Fire Alarm
F3	Arm Away (factory fixed key)
F4	Arm Stay (factory fixed key)
F5	Disarm (works in Master Mode only) (factory fixed key)
F6	Select zones to bypass (factory fixed key)
F7	Arm in Night Mode
F8	Medical

You can program any function key, unless it is fixed at the factory. The following example configures the F1 key so it performs the manual fire alarm function.

1. Navigate with the ↑↓ keys to *Installer Menu>This Keypad>Function Keys* and press **OK**.
2. Scroll to *F1 Function>Fire Alarm* and press **OK**.
3. The keypad beeps once to confirm the change and returns to *F1 Function*.
4. Navigate with the ↑↓ keys to *Control Panel>Partition Settings>Partition 1>Feature Select>Keypads>Fire/Aux 1* and press **OK**.
5. Select *Enabled* and press **OK**.
6. The keypad beeps once to confirm the change and returns to *Fire/Aux 1*.

Table 19. Available function key actions

Function	Action description
Disabled	Disables the function key.
Arm Away Mode	Arms the system in Away mode. Arming with the function key will report as User 98. **Note:** This shortcut works only if the Quick Arm menu option was set. It works differently in the master mode and in the single-partition mode. For more information, see the *Master Keypad*, and the *Quick Arm* menu option descriptions in the glossary.
Arm Stay Mode	Arms the system in Stay mode. Arming with the function key will report as User 98. **Note:** This shortcut works only if the Quick Arm menu option was set. For the Stay mode to work correctly, interior zones must be set. It works differently in the master mode and in the single-partition mode. For more information on this button behaviour, see the *Master Keypad*, and the *Quick Arm* menu option description in the glossary.
Bypass Zones	Selects a zone to bypass. It is a shortcut for the *User Menu>Bypass Zones* menu option.

	The *Enter Zone No.* prompt displays. Type the zone number and press OK. Repeat this action for subsequent zones you want to bypass. To remove a zone from the bypassed zone set enter its number again. To partarm the system with the selected zones bypassed, enter the user code. Disarming the system clears the bypassed zone set.
Group Bypass	Automatically bypasses all the zones with the *Group Bypass* attribute set (for example, *Interior Follower with Group Bypass Enabled* zone type). It is a shortcut for the *User Menu>Group Bypass* menu option. To cancel Group Bypass function press the button again. To partially arm the system with the selected zones bypassed, enter the user code. Disarming the system clears the bypassed zone set.
Light Control	Allows to turn on or off the X-10 devices connected to the system. It is a shortcut for the *User Menu>Light Control* menu option.
Alarm Memory	Displays the alarm memory list. It is a shortcut for the *User Menu>Alarm Memory* menu option. The way the list of alarms is displayed depends also on a setting of the First Alarm Logic menu option (see First Alarm Logic).
Service Check	Performs the service check. It is a shortcut for the *User Menu>Service Check* menu option.
Detector Reset	Resets all the detectors. It is a shortcut for the *User Menu>Detector Reset* menu option.
Answer U/D Call	Answers an upload/download call. It is a shortcut for the *User Menu>Download>Answer U/D Call* menu option.
Begin U/D Call	Starts an upload/download call. It is a shortcut for the *User Menu>Download>Begin U/D Call* menu option.
Silent Exit	Prevents the exit time buzzer activating when the system is armed or during the re-exit time. It is a shortcut for the *User Menu>Silent Exit* menu option. This function also doubles the exit delay (for example, if exit delay is set to 30 seconds, it changes to 60 seconds).
Chime	Toggles the Chime mode off and on (there is a chime icon displayed to indicate the mode selected) for the Chime type zones. A chime is often used as an indication on a shop door. There is a beep on chime activation and no beep on deactivation.
Panic Keypad	Starts the panic alarm, which can be cancelled by entering the user code. Depending on the partition settings, the panic alarm can be silent or audible (see *Emergency Keys, Silent PA, Audible PA, Speaker Lockout* menu option descriptions in the glossaries). The alarm is reported and is listed in the event log. **Note:** When you press the panic key and *This keypad>Keypad Features>Beep on Panics* option is disabled, no keystroke sound is emitted.
Medical (Aux2)	Starts the medical alarm, which can be cancelled by entering the user code. The alarm is reported and is listed in the event log. For the function to work, the *Medical/Aux 2* menu option must be set for the partition. Depending on the *Emergency Keys* menu option setting, this alarm can be silent or audible.
Fire Alarm	Starts the fire alarm, which is always audible. The alarm is reported and is listed in the event log. For the function to work, the *Fire/Aux 2* menu option must be set for the partition.
Phone Number	Allows the user to enter up to three telephone numbers to which events are reported by the control panel. It is a shortcut for the *User Menu>Phone Numbers* menu option. For the function to work, the *User Phone Editing* menu option must be enabled, and the voice protocol must be set for reporting. Voice protocols typically report to the homeowner's mobile phone rather than to the central station. The *Phone No.* prompt displays. Type the telephone ID (1 to 3) and press OK. The *Enter Phone No.* prompt displays. Type the telephone number the way it should be dialled by the communicator (including the all necessary prefixes) and press OK.
Arm Night Mode	Arms the system in Night mode. Arming with the function key will report as User 98. **Note:** This shortcut works only if the Quick Arm menu option was set. For this mode to work correctly, entry guard zones must be set. It works differently in the master mode and in the single-partition mode. For more information on this button behavior, see the *Master Keypad*, and the *Quick Arm* menu option description in the glossary.
Cancel	Pressing the Cancel button stops sending reports to the central station.
Info Key	This function displays the Custom Message on the LCD screen. Displaying is finished after OK or No key is pressed.

Setting up the tamper switch

The wireless keypad has a pry-off switch. The installer decides how the keypad behaves whenever removed from its wall mounting plate. The option *Always Tamper* actually fixes the wireless keypad to the wall just like a wired one, while disabling this option renders the keypad fully portable within the reach of the RF link. An additional option *Only Arm AWAY if On the Wall* ensures that the keypad is always mounted onto its bracket before arming in the Away mode. Both these options together ensure that the keypad will stay on the wall as long as the system is armed. The following example fixes the wireless keypad to the wall.

1. Navigate with the ↑↓ keys to *Installer Menu>This Keypad>Keypad Features>Pry Off Switch* and press **OK**.
2. Scroll to *Always Tamper>Enabled* and press **OK**.
3. The keypad beeps once to confirm the change and returns to *Always Tamper*.
4. Navigate with the ↑↓ keys to *Only Arm AWAY if On the Wall* and press **OK**.
5. Scroll to *Enabled* and press **OK**.
6. The keypad beeps once to confirm the change and returns to *Only Arm AWAY if On the Wall*.

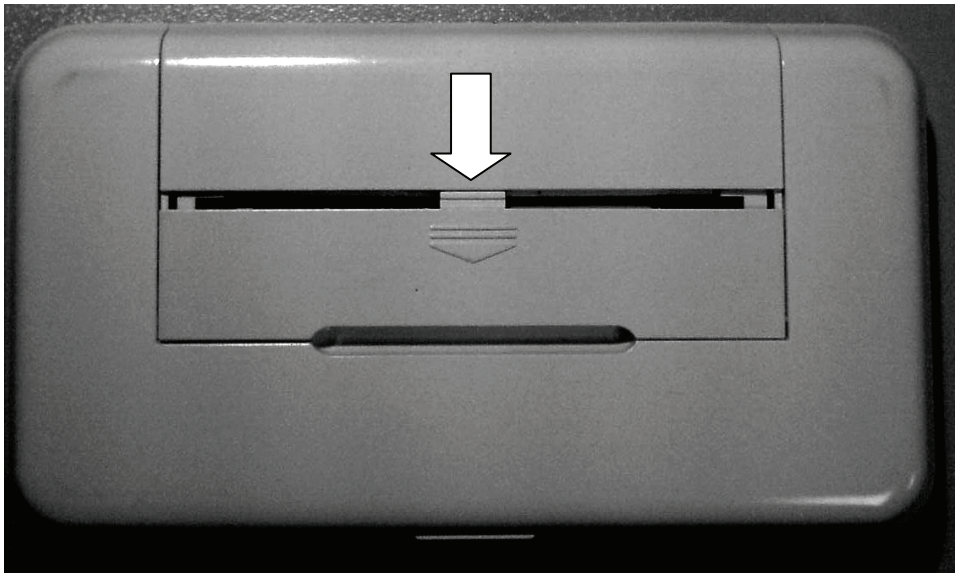
Battery replacement

Wireless keypads hold four AA-sized 2800 mAh cells for powering the keypad itself, and two extra AA-sized 2800 mAh cells for supplying power to the backlight. The backlight cells are not supervised. Typical operation, defined as five arming and disarming cycles per 24 hours, shall result in an expected battery lifetime of at least 3 years. Fully configuring a typical installation through a wireless keypad will reduce battery lifetime by somewhere between 10 days and one month. The wireless keypad has an operating battery compartment switch to protect the keypad's integrity. As opposed to the backlight battery compartment, the operating battery compartment can never be opened without creating a tamper alarm unless the user follows a proper procedure and the partition the keypad belongs to is disarmed.

Note: Any unauthorized opening of the battery compartment will cause tamper alarm in the system. When in installer mode, the installer can replace keypad batteries anytime. It may require resetting the system if the wireless keypad is the only keypad in the system, therefore it is recommended to initiate the installer mode from another keypad, if available. The battery compartment must be closed while restarting the panel to avoid tamper alarm.

Backlight battery replacement

1. Push the battery compartment cover in a direction indicated by the arrow symbol on the cover.



2. Open the backlight battery compartment and replace batteries.

Operating battery replacement

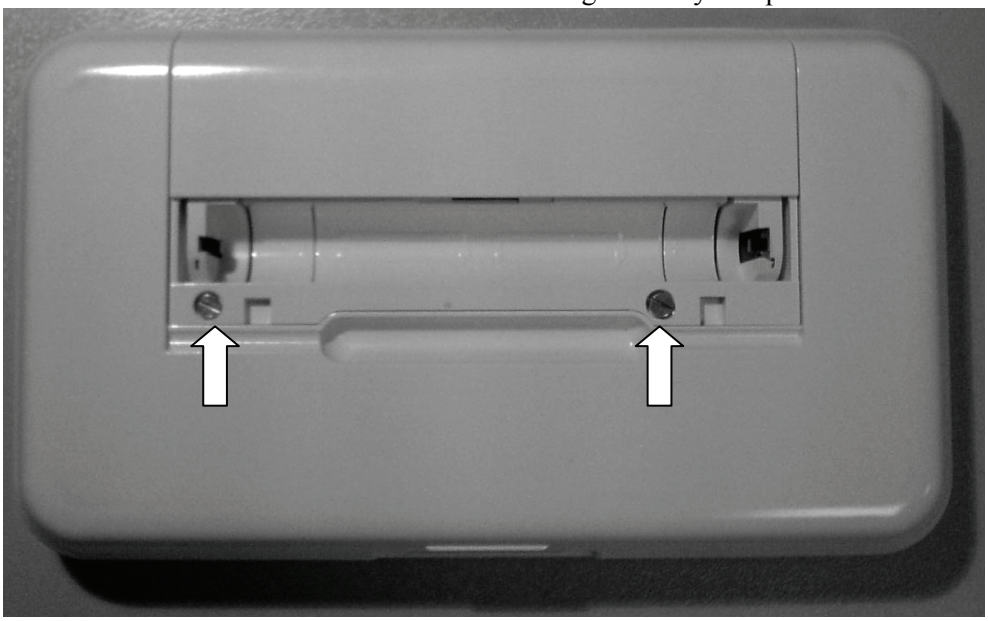
The master user is allowed to perform the operating battery replacement according to the following procedure.

3. Disarm the system.
4. Press **OK** and enter your master user code to open the *User Menu*.

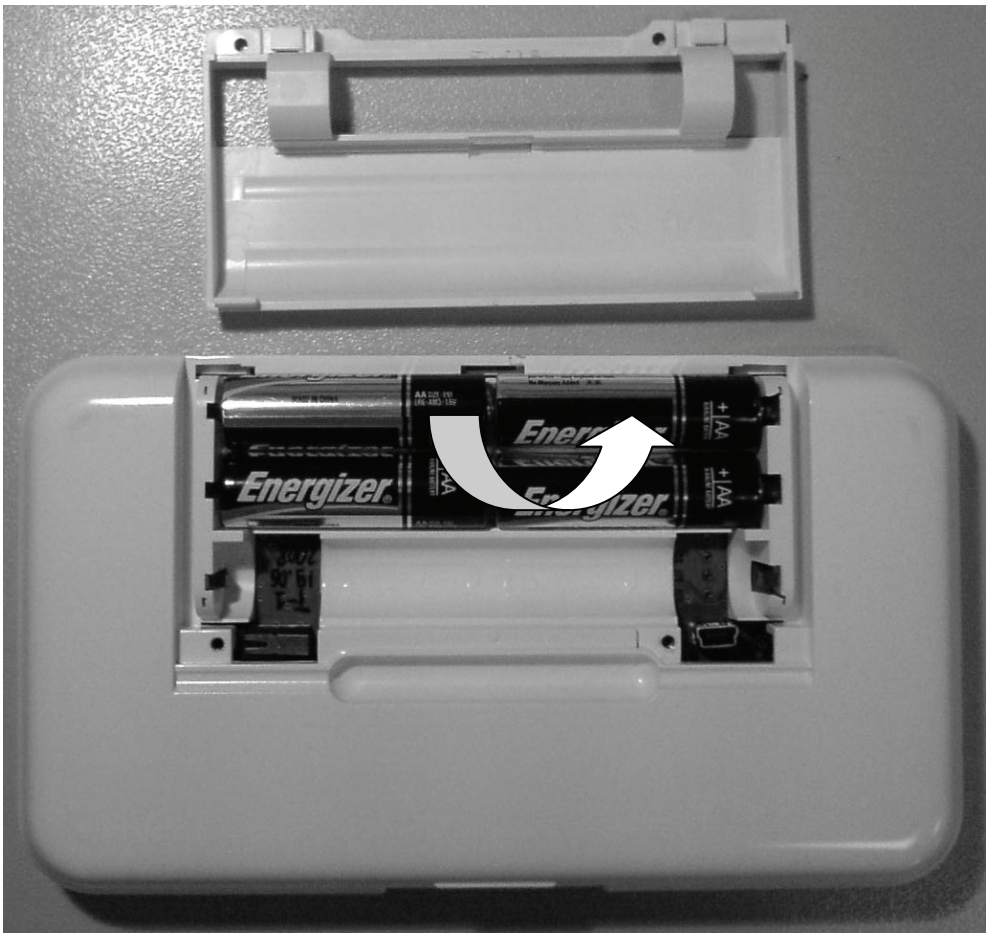
5. Navigate with the ↑↓ keys to *Change Batteries* and press **OK**. Note, that *Change Batteries* option in User Menu is available only when keypad partitions are disarmed and when the *This Keypad>Keypad Features>Battery Change Allowed* menu option (in the Installer Menu) is set to *Yes*.

6. Open the backlight battery compartment as described above.

7. Unscrew two screws inside the backlight battery compartment as shown below.



8. Open the operating battery compartment and replace all four batteries. You have 5 minutes to finish this operation. You must use Duracell or Energizer "AA" batteries only.



9. After replacing batteries, you have to close the battery compartment in 30 seconds.
10. If "*Type # to finish*" message is displayed, press the # key to restore normal keypad operation.

CAUTION: Batteries can explode or cause burns when recharged, incorrectly (dis)assembled, or exposed to fire or high temperatures. Dispose of used battery according to battery directive instructions and/or as required by local laws. Keep away from children.

Only replace the batteries with Energizer or Duracell AA batteries. Do not use a different type of batteries. Always use batteries that are from the same batch, and always replace all batteries with fresh ones simultaneously.

Master mode

You can program a keypad to act as a single-partition keypad or a master keypad by default. A single-partition keypad allows the user to arm one partition only while a master keypad allows the user to arm one or more partitions. A user with appropriate rights can change a single-partition keypad to a master keypad and vice versa.

1. Navigate with the ↑↓ keys to *This Keypad>Keypad Features>Master Keypad* and press **OK**.

- Select *Yes* to set the keypad as a master keypad by default.
- Select *No* to set the keypad as a single-partition keypad by default.

2. Press **OK** to save the setting.
3. The keypad beeps once to confirm the change and returns to *Master Keypad*.

Assigning X-10 devices

The keypad can be used to activate selected X-10 devices. The following example programs the unit code (3) and house code (L) for device 1.

1. Navigate with the ↑↓ keys to *This Keypad>Keypad Features>Advanced Options>Light Control>Device 1* and press **OK**.
2. Scroll to *Unit Code* and press **OK**.
3. Select *3* and press **OK**.
4. The keypad beeps once to confirm the change and returns to *Unit Code*.
5. Scroll to *House Code* and press **OK**.
6. Select *L* and press **OK**.
7. The keypad beeps once to confirm the change and returns to *House Code*.

Copying keypad settings

The current keypad settings can be copied to one or multiple keypads in the system. The following example copies the current keypad settings to another keypad in the system.

1. Navigate with the ↑↓ keys to *This Keypad>Copy Keypad>To One Keypad* and press **OK**.
2. Select the relevant partition number and press **OK**.
3. Select the number of the keypad to which the settings will be copied and press **OK**.
4. The keypad displays the message *Copying* while copying the settings and returns to *Keypad #* when copying is complete.

Note: In case of wireless keypads, settings are copied from the keypad to the RF receiver first and then sent to the target keypad (or one-by-one to consecutive keypads). It takes some time, and can sporadically affect other communication with the source/target keypad, including false state of the range indicator and/or status icons. It is a temporary state, and after copying is finished all icons will again show correct state of the system.
Due to the large number of data being transmitted, it is recommended that no other operations are performed during copying as it can affect operation of the system. It applies in particular to the wireless keypads.

Configuring keypad text

The keypad supports more than 10 different languages. The installer can select up to 4 languages (*Language 1* to *Language 4*) for the end-user keypad operation. You can set several languages on the keypad. The following example configures French as the second keypad language.

1. Navigate with the ↑↓ keys to *This Keypad>Set KP Language* and press **OK**.
2. The current language is displayed as *Language 1*.

3. Scroll to *Language 2* and press **OK**.
4. Use the ↑↓ keys to select *Français* and press **OK**.
5. The keypad returns to *Set KP Language*.
6. Repeat these steps to set other languages.

Setting installer messages

Up to four messages can be displayed on the LCD when the keypad is idle or when it times out from a menu. If you enable more than one message, the messages are shown in a continuous cycle.

- Installer custom message
- Date and time
- Service required message
- System ready/not ready

To enable the custom message:

1. Navigate with the ↑↓ keys to *This Keypad* and press **OK**.
2. Select *Keypad Features>Custom Message* and press **OK**. The current status of the installer message is displayed. In this case, it is disabled by default.
3. Use the ↑↓ keys to change the status to enabled and press **OK**.
4. The keypad beeps once to accept the change and returns to *Custom Message*.

To edit the custom message:

1. Navigate with the ↑↓ keys to *This Keypad* and press **OK**.
2. Select *Program KP Text,* press **OK**, and then select a language using the ↑↓ keys.
3. Scroll to *Zones/Messages>Custom Message*, press **OK**, and then edit the appropriate line of the message.
4. Press **OK**. The keypad beeps once to accept the change and returns to *Custom Message*. Edit the other line of the message, if required.

Setting the keypad partition and keypad number

When you first power up the keypad, you are prompted to set the language, the default country and the partition and keypad number for the current keypad. The keypad can connect to the bus only after you set these numbers. The partition number and keypad number prompts are displayed for the initial setting only. To change these numbers again, scroll to *This Keypad>Partition Number* and *This Keypad>Keypad Number*.

Setting the exit buzzer options

You can configure a behaviour of the warning signal emitted during the exit delay, when the user is leaving premises. The menu entries responsible for the keypad buzzer are partially located in the

Partition Settings and *System Settings* groups of the *Control Panel* menu. These settings affect all the keypads in the system or all the keypads in the partition. For example to cancel the keypad exit buzzer completely for all the keypads:

1. Navigate with the ↑↓ keys to *Control Panel* and press **OK**.
2. Scroll to *System Settings>Feature Select>Miscellaneous>Silent Exit Always*.
3. Use the ↑↓ keys to change the status to *Yes* and press **OK**.
4. The keypad beeps once to accept the change and returns to *Silent Exit Always*.

You can also silence the particular keypad. The following options cancel the exit buzzer and chime on the current keypad only:

1. Navigate with the ↑↓ keys to *This Keypad* and press **OK**.
2. Select *Keypad Features>Silent Keypad* and press **OK**.
3. Use the ↑↓ keys to change the status to *Yes* and press **OK**.
4. The keypad beeps once to accept the change and returns to *Silent Keypad*.

To set advanced buzzer options for the keypad on partition 1, when exit delays are set to 20 seconds and 10 seconds respectively:

1. Navigate with the ↑↓ keys to *Control Panel* and press **OK**.
2. Scroll to *Partition Settings>Partition 1>Timers>Exit Time 1* and press **OK**.
3. Type **20** and press **OK**.
4. The keypad beeps once to accept the change and returns to *Exit Time 1*.
5. Scroll to *Partition Settings>Partition 1>Timers>Exit Time 2* and press **OK**.
6. Type **10** and press **OK**.
7. The keypad beeps once to accept the change and returns to *Exit Time 2*.
8. Navigate with the ↑↓ keys to *This Keypad* and press **OK**.
9. Scroll to *Keypad Features>Advanced Options>Buzzer On Exit>Exit Time 1*.
10. Use the ↑↓ keys to change the status to enabled and press **OK**.
11. The keypad beeps once to accept the change and returns to *Exit Time 1*.
12. Scroll to *Keypad Features>Advanced Options>Buzzer On Exit>Exit Time 2*.
13. Use the ↑↓ keys to change the status to disabled and press **OK**.
14. The keypad beeps once to accept the change and returns to *Exit Time 2*.

This setting will cancel the final confirmation beep at the end of the exit time, and cause the keypad to beep slowly for the first 10 seconds and then to beep fast for the last 10 seconds of the exit delay countdown.

Note: This option works for the Arm Away mode only; for the Arm Stay mode the keypad is always silent.

The keypad buzzer behaviour depends on both *Buzzer On Exit>Exit Time 1* and *Buzzer On Exit>Exit Time 2* settings, and is described in the following table:

Table 20. Behaviour of the keypad buzzer based on the Buzzer On Exit settings (example).

ET1 = 10 s	ET2 = 20 s	Expect
OFF	OFF	Silence for 20 s + confirmation beep
OFF	ON	20 s slow beep
ON	OFF	10 s fast beep + confirmation beep
ON	ON	20 s slow beep + confirmation beep
ET1 = 20 s	**ET2 = 10 s**	**Expect**
OFF	OFF	Silence for 20 s + confirmation beep
OFF	ON	10 s slow beep + confirmation beep
ON	OFF	10 s slow beep + 10s fast beep
ON	ON	20 s slow beep + confirmation beep
ET1 = 10 s	**ET2 = 10 s**	**Expect**
OFF	OFF	Silence for 10 s + confirmation beep
OFF	ON	10 s slow beep
ON	OFF	10 s fast beep + confirmation beep
ON	ON	10 s slow beep + confirmation beep

Glossary

Location	Term	Definition
3	**This Keypad**	A menu entry that groups the settings of the current keypad. It allows resetting of the keypad, configuration of keypad features and verification of software version and models.
3.1	**Keypad Number**	A menu option that sets the keypad number within the partition. The keypad can be numbered from one to eight. The selected number links to the module number reported to the central station in the case of tampers or expansion troubles.
3.2	**Partition Number**	A menu entry menu option that specifies the partition that the selected keypad can access if it is a single-partition keypad. Together with the keypad number, it determines the keypad bus module number for both single-partition and master keypads.
3.3	**Keypad Features**	A menu entry that groups keypad options.
3.3.1	**Case Tamper**	A menu option that sends a tamper report to the central station and activates a siren and/or the keypad when interference with keypad housing occurs. A tamper occurs when the casing of a piece of hardware (for example, the control panel, sound box or keypad) is interfered with. The panel has an input for a normally closed tamper switch. When opened, a box/case tamper is reported as an event.
3.3.2	**Silent Keypad**	A menu option that silences the keypad's entry/exit sounder and chime only.
3.3.3	**Ding Dong Chime**	A menu option that sets the sound a chime makes. It is either a ding dong or a beep.

Location	Term	Definition
3.3.4	**5 sec silence**	A menu option that silences the pulsing keypad sounder for five seconds when a key is pressed.
3.3.5	**Armed Zone Info**	A menu option that enables the mode that displays zone status on the keypad when the system is armed. When this mode is disabled, zone status information is not displayed when armed.
3.3.6	**Beep on Panics**	A menu option that sounds a keypad beep when the panic function key (personal attack alarm, medical alarm or fire alarm) is held down. When this option is disabled, all three panic function keys are mute (no keystroke sound is emitted).
3.3.7	**Master Keypad**	A menu option that sets the default mode of the selected keypad to master mode. This is a mode of operation on a keypad that allows a user or installer access multiple partitions within the system and to perform functions in these partitions. In order to arm (in Stay, Night or Away mode) or disarm a partition the user must enter the user code, select the partition, and then press the appropriate function button. A master keypad can be temporarily switched to operate in single-partition mode and a single-partition keypad can be temporarily switched to operate in master mode.
3.3.8	**Service Message**	A menu option that enables or disables the service messages on the keypad. A message displayed on the LCD keypad informing the user or installer of a system fault. The service message disappears from the keypad when the installer enters and leaves programming mode. The message is used as an Engineer Reset.
3.3.9	**Custom Message**	A menu option that shows or hides the custom message on the LCD keypad.
3.3.10	**Custom Message Lock**	A menu option that makes the customized keypad message on the programmed keypad independent from other keypads in the system. If disabled, editing the custom message on any keypad affects all keypads in the system, i.e. all keypads always display the same message.
3.3.11	**Clock**	A menu option that displays the clock on the keypad. This is the internal real time clock used for the schedules and autotest intervals.
3.3.12	**24-hour Clock**	A menu option that switches between 24-hour and 12-hour notation.
3.3.13	**Battery Change Allowed**	A menu option that allows the user to replace keypad batteries. See *Battery replacement* on page 157 for the battery replacement procedure description.
3.3.14	**Advanced Options**	A menu entry that groups LCD display options for the keypad.
3.3.14.1	**Type OK for Menu**	A menu option that enables the menu prompt 'Type OK for Menu'.

Location	Term	Definition
3.3.14.2	**LED Extinguish**	A menu option that enables or disables LED Extinguish function for an individual keypad. Both options (the one for a partition an the one for a keypad) must be enabled for this feature to work. It turns off all status icons on the keypad (except for the Power icon) after 20 seconds without a key press. All icons are displayed again when any key is pressed.
3.3.14.3	**Hide PINs**	A menu option that displays the user code as dashes when programming codes using the keypad. If this option is disabled, each digit is shown rather than displayed as a dash.
3.3.14.4	**Beep on RF loss**	A menu option that activates the keypad sounder, causing it to beep, when an RF zone is lost. This beep indicates that the receiver did not receive the supervision signal from the wireless transmitter. On the wired keypad the RF Zone Lost event is signalized by three beeps every 5 minutes. On the wireless keypad the RF Zone Lost event is signalized after 15 seconds from the wake up and then every 5 minutes from the last signal if the keypad is in the active mode.
3.3.14.5	**Always Master Mode**	A menu option that enables a mode on a master keypad in which partition status is always displayed regardless of each partition state.
3.3.14.6	**User Phone Editing**	A menu option that allows the user to change the phone numbers used for alarm reporting. Typically, the installer programs the central station phone numbers and is the only person who can change the number. However, when voice protocol and siren protocol are used, the user can change the phone number. These protocols typically report to the homeowner's mobile phone rather than to the central station.
3.3.14.7	**Buzzer On Exit**	A menu entry that specifies that the keypad should beep during the exit delay countdown (Exit 1 or Exit 2). Also *System Arming, Leave Now* screen displays until the end of the exit delay time. Note: This option works for the Arm Away mode only, for the Arm Stay mode the keypad is always silent. Also see the *Silent Exit Always* control panel menu option.
3.3.14.8	**Light Control**	A menu entry that groups X-10 device options for the selected keypad.
3.3.14.8.1	**Unit Code**	A menu option that sets the X-10 unit code used to identify a particular X-10 device on the selected module.
3.3.14.8.2	**House Code**	A menu option that sets the code used to identify a particular premises. It is necessary in case any neighbouring premises also has an X-10 home automation system. More information on the X-10 home automation system can be found at www.x-10europe.com.
3.3.14.9	**Latch Faults until Viewed**	A menu option that, if enabled, sets the keypad to display

Location	Term	Definition
		the alarms until they have been viewed.
3.3.14.10	**Display Contact Central Station**	A menu option that, if enabled, sets the keypad to display the message *Contact Central Station* after an alarm has been reported and the system disarmed.
3.3.14.11	**KP Shutdown shows Clock**	A menu option that causes the keypad to display the date and time instead of the "Please Enter Your Code" message.
3.3.14.12	**KP Shutdown allows Disarm**	A menu option that, if enabled, allows a blanked keypad to be disarmed.
3.3.14.13	**Status LED**	A menu option that, if enabled, turns on the backlighting for the state indicator (GE logo) on the keypad.
3.3.14.14	**Status LED Always On**	A menu option that, if set to *Yes*, causes the state indicator to be on at all times. This option is accessible only on a wired keypad.
3.3.15	**Pry Off Switch**	A menu entry that groups the wireless keypad options related to the pry off switch.
3.3.15.1	**Always Tamper**	A menu option that turns on the wireless keypad's pry off switch. It actually fixes the wireless keypad to the wall just like a wired one, while disabling this option renders the keypad fully portable within the reach of the RF link.
3.3.15.2	**Only Arm-away if On the Wall**	A menu option that allows to arm the system in Away mode only if the wireless keypad is on the wall.
3.4	**Function Keys**	A menu entry that groups all programmable function key options. Function keys are dedicated for a particular function as programmed by the installer. See *Programming the function keys* on page 154.
3.5	**Set KP Language**	A menu option that selects the keypad interface languages available to the user. It is possible to select up to four languages (*Language 1* to *4*) out of all available interface languages. The languages selected here, can be then toggled by the user (or installer) with the OK key.
3.6	**Program KP Text**	A menu entry that groups the language options of the current keypad. It allows the installer to set options such as zone name descriptors and user names.
3.6.1	**Zones/Messages**	A menu entry that groups descriptors, such as zone names and custom messages. These names and messages are language dependent, for example, setting a display language also changes displayed zone names to the ones defined for this language.
3.6.1.1.1	**Zone Names**	A menu option that specifies the name of each zone and allows these names to be edited.
3.6.1.1.2	**Partition Names**	A menu option that specifies the name of each partition.

Location	Term	Definition
3.6.1.1.3	**Custom Message**	A *This Keypad* menu option that edits the custom message.
3.6.1.1.4	**Shutdown Message**	A menu option that edits the message that is displayed on the keypad when the control panel is in shutdown mode.
3.6.1.1.5	**Copy Language**	A menu option that copies information from the current keypad descriptors to another or multiple keypads in the system. Included are the zone descriptors, custom message, shutdown message, zone names and partition names.
3.6.2	**User Names**	A menu option that specifies a name for each user code. The maximum length of a user name is 15 characters.
3.6.3	**Zone Type Names**	A menu option that allows the installer to define names for each installed zone type. For example, Type 1 can be named Burglary A Alarm, Type 2 can be named Fire Alarm, Type 3 can be named Entry/Exit and so on.
3.6.4	**Word Library**	A menu option that enables the word library. This is a predefined collection of words that speed up text editing. As the user/installer types a character, the keypad automatically displays a matching word. The word library is enabled by default.
3.6.5	**Copy All Texts**	A menu option that copies all textual information from the current keypad to all other keypads in the system. Included are user names, custom message, shutdown message, zone names and partition names in all languages set on the source keypad. Copying happens after exiting from the installer menu.
3.7	**Copy Keypad**	A menu option that copies the current keypad settings to another or multiple keypads in the system.
3.7.1	**To One Keypad**	A menu option that specifies that the current keypad settings are copied to one specific keypad.
3.7.2	**To All Keypads**	A menu option that specifies that the current keypad settings are copied to all connected keypads. **IMPORTANT**: In the system with mixed (wired and wireless) keypads, it is strongly recommended to start this command from a WIRED keypad. Triggering this command from a wireless keypad in the mixed system can end with a timeout and cause incorrect copying results.
3.8	**Load Country Defaults**	A menu option that defaults the keypad to the country settings for the selected country.
3.9	**Reset Settings**	A menu option that defaults the keypad to factory defaults.
3.10	**Switch to EN**	A menu option that switches the keypad to the EN 50131-compatible settings. For additional information about the EN 50131 norm, see Appendix 7.
3.11	**Diagnostics**	A menu entry that groups the wireless keypad options related to keypad's diagnostics, like good packet count, last bad packet, etc.

Location	Term	Definition
3.12	**Model**	A menu option that displays the current model of the keypad.
3.13	**Version**	A menu option that displays the current software version of the keypad.
3.14	**Traceability**	A menu entry that groups the keypad additional information, like serial number, manufacture date, and firmware revision.

Technical specifications

NX-1048-R-W wireless LCD keypad

Power supply specifications		
Electronics	Number and type of batteries	4 x AA size, 1.5 V, primary cell
	Battery capacity	5700 mAh
	Battery lifetime, typical [1]	3 years
Optional backlight	Number and type of batteries	2 x AA size, 1.5 V, primary cell
	Battery capacity	2850 mAh
	Battery lifetime, typical	6 months
Board operating voltages, electronics and backlight		2.1 V ... 3.1 V ⎓
Current consumption – sleep mode, alphanumeric display OFF		70.0 uA at 3.1 V ⎓ ± 5%
Current consumption – active mode, alphanumeric display ON		21.7 mA at 3.1 V ⎓ ± 5%
Current consumption – transmitting RF, alphanumeric display OFF		39.1 mA at 3.1 V ⎓ ± 5%
Current consumption – standby, alphanumeric display OFF		9.7 mA at 3.1 V ⎓ ± 5%
Current consumption – optional backlight, when ON		30.0 mA at 3.1 V ⎓ ± 5%
General feature specifications		
PCB Size	Dimensions (width x height x depth)	158 x 88 x 1.2 mm
Housing Size	Dimensions (width x height x depth)	178 x 102 x 28 mm
Environmental	Operating temperature	–10 °C to +55 °C
	Humidity	Max 95%, non condensing
	Shipping weight	441 g
	EN 50131 grade and class	Security Grade 2, Environmental Class II
	ACE type	Type B - Moveable

	Certification	CE EN 50131-1 System requirements EN 50131-3 Control and indicating equipment EN 50131-6 Power Supplies EN 50131-5-3 Requirements for interconnections equipment using radio frequency techniques Tested and certified by Telefication B.V.

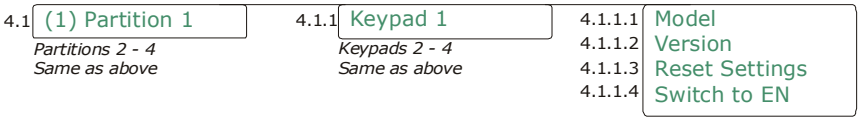
[1] Replace batteries within 30 days after Battery low indicator becomes active.

NX-1048-W LCD keypad (wired)

Power supply specifications		
Power supply voltage		9 V ... 14.4 V ⎓ ± 2%
Current consumption – backlight ON, buzzer ON		35.0 mA at 13.8 V ⎓ ± 5%
Current consumption – backlight ON, buzzer OFF		28.9 mA at 13.8 V ⎓ ± 5%
Current consumption – standby		13.8 mA at 13.8V ⎓ ± 5%
General feature specifications		
PCB Size	Dimensions (width x height x depth)	158 x 88 x 1.2 mm
Housing Size	Dimensions (width x height x depth)	178 x 102 x 20 mm
Environmental	Operating temperature	–10 °C to +55 °C
	Humidity	Max 95%, non condensing
	Shipping weight	227 g
	EN 50131 grade and class	Security Grade 2, Environmental Class II
	ACE type	Type B - Fixed
	Certification	CE EN 50131-1 System requirements EN 50131-3 Control and indicating equipment Tested and certified by Telefication B.V.

Chapter B4 Programming the other keypads

Figure 24. Other keypads menu



To program other keypads, select *Installer Menu>Other Keypads* and select the partition containing the keypad. You can view the keypad version and model and default the selected keypad.

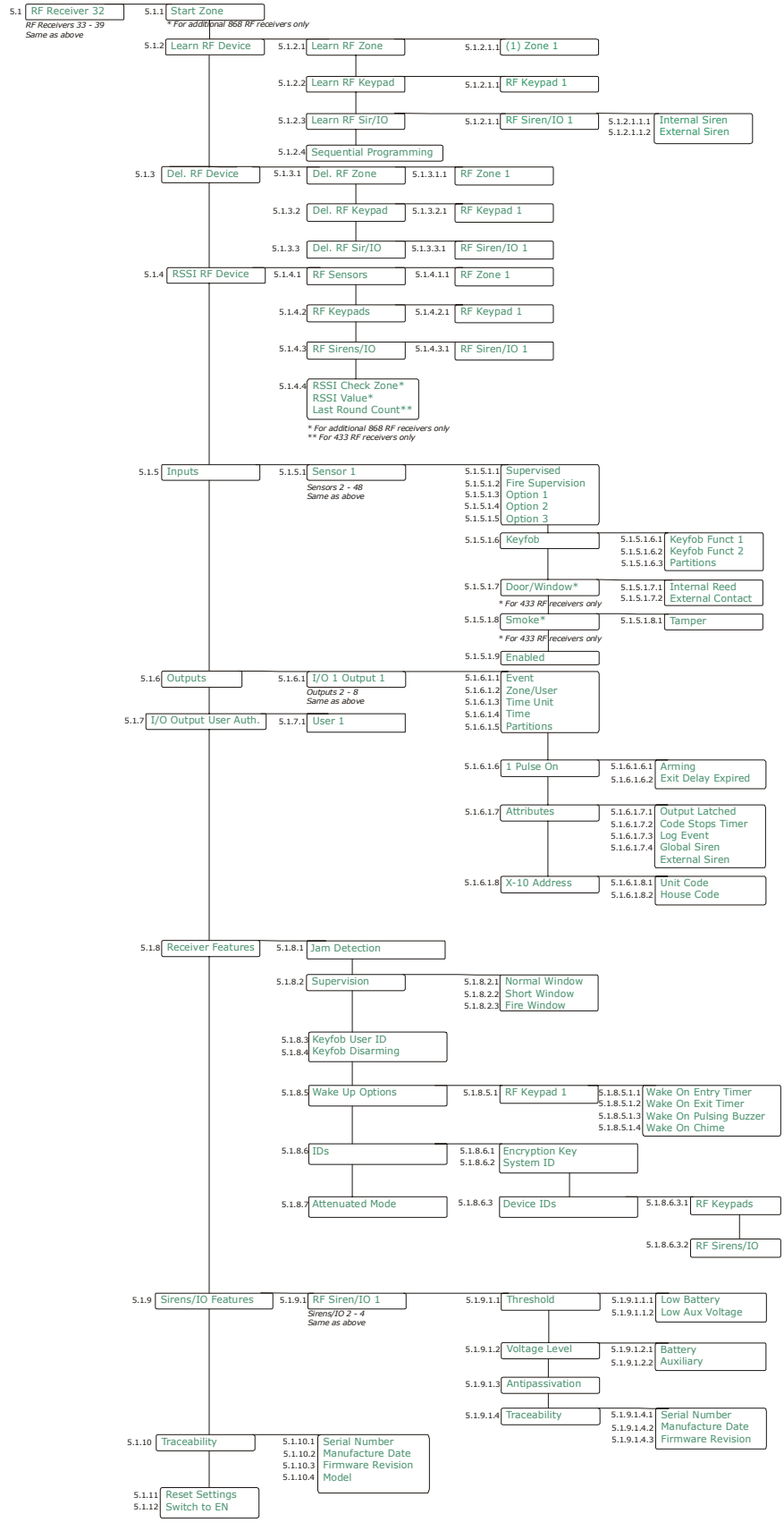
Glossary

Location	Term	Definition
4	**Other keypads**	A menu entry that groups programming options for other keypads in the system.
4.1.1.1	**Model**	A menu option that displays the current model of the selected keypad.
4.1.1.2	**Version**	A menu option that displays the current software version of the selected keypad.
4.1.1.3	**Reset Settings**	A menu option that defaults the selectedd keypad to factory defaults.
4.1.1.4	**Switch to EN**	A menu option that switches the selected keypad to the EN 50131-compatible settings. For additional information about the EN 50131 norm, see Appendix 7.

Chapter B5 Setting up the RF receivers

Programming the RF system

Figure 25. RF menu



The built-in wireless receiver of the NetworX V3 is compatible with wireless sensors and keyfobs of the type 868MHz Generation 2 only. Existing receivers (868MHz FM and 433MHz AM) can also be connected to the NetworX V3 databus. The NetworX V3 built-in receiver is enrolled as module 32.

Defaulting the wireless modules

You must enrol and default each RF receiver before you begin programming the system.

1. Navigate with the ↑↓ keys to *RF Receivers* and press **OK**.
2. Select the relevant module bus ID and press **OK**. In this case select *RF Receiver 32* and press **OK**.
3. Select *Reset Settings* and press **OK**.
4. A confirmation message is displayed. Press **OK** to accept the default settings.
5. The keypad sounder beeps once to confirm the reset.

Programming the wireless detectors

1. Navigate with the ↑↓ keys to *RF Receivers* and press **OK**.

Note: It is recommended to not learn any devices from keypad which belongs to a partition different then Partition 1.

2. Select the relevant module bus ID and press **OK**. In this case select *RF Receiver 32* and press **OK**.
3. Scroll to *Start Zone* and press **OK**.
4. Enter the starting zone of the receiver. In case of the RF Receiver 32 (the NetworX V3 built-in 868MHz Gen2 receiver), this option is not visible. In the NetworX V3 system, you can set this value for additional RF receivers only. For the RF receiver 32, the starting zone is always zone 1.
5. Scroll to *Learn RF Device* and press **OK**.
6. To learn-in more than one device, scroll to *Sequential Programming*, select *Yes* and press **OK**.
7. Scroll to *Learn RF Zone* and press **OK**.
8. Enter the zone number to start with. In this case, enter 9 to program the detectors in zones 9 and 10 and press **OK**.
9. Tamper the different detectors in sequence. To do this, you activate the sensor's tamper switch. Table 21 *Learning RF transmitters* explains how to activate each type of sensor.

Table 21. Learning RF transmitters

Transmitter	Action
Door/Window	Activate the tamper switch by removing the cover.
PIR	Activate the tamper switch by removing the cover.
DUAL	Activate the tamper switch by removing the back plate from the DUAL.

Transmitter	Action
Fire detector	Press and hold the test button. **Note:** Some fire detectors require activating the tamper switch instead. See the detector manual for exact instructions. **Note:** If installer wants to replace a fire sensor (the zone type is set to Fire) then the installer at the beginning should change the zone type to the other type, delete the sensor, learn-in and mount a new sensor, and then set up back the Fire zone type.
Two Button Panic	Press and hold the two buttons together.
Four Button Keyfob	This keyfob needs a special procedure to start the learn-in mode. See the keyfob manual for precise instructions. **Note:** If the key sequence, that is required to start the learn-in mode on the keyfob, is accidentally triggered by the user, the keyfob creates a new encryption key. It stops all communication between the keyfob and the radio module. In order to fix it, the installer needs to delete the keyfob using the *RF Receivers* menu, and then to learn-in the keyfob again.

10. Press ## (or press **NO** repeatedly) to leave the programming mode. The *OK to Exit* prompt is displayed. Press **OK**. The system now functions as a normal alarm system.

Note: You can use the *Del. RF Device* menu option. to delete an enrolled RF zone (sensor).

Note: It is recommended to first learn-in a detector and then to set up detector's parameters, especially the zone type.

Note: Partition number stored with the alarm event is the first partition the triggered sensor belongs to. So if the sensor belongs to partitions 1 and 4, the partition number sent with the event will be 1. It should be taken into consideration when setting up multi-partition sensors or configuring outputs based on alarm events. Also, in case of tamper on the zone assigned to all partitions, "Siren On" flag is activated only for Partition 1, so alarm icon is activated only on keypads with assigned Partition 1 (partition 1 keypads and master keypads).

Learning-in additional wireless keypads

Wireless keypads are a separate type of wireless devices that require different programming procedures. The procedure below allows to program additional keypads in the system. For step-by-step instructions about installing the very first wireless keypad, see the *Wireless keypad learning-in* procedure section.

1. Using the existing keypad, enter the programming mode, navigate with the ↑↓ keys to *RF Receivers* and press **OK**.

Note: It is recommended to not learn any devices from a keypad which belongs to a partition different then Partition 1.

2. Select the relevant module bus ID and press **OK**. For example, you can select *RF Receiver 32*, which is the NetworX V3 built-in receiver.
3. Select *Learn RF Device>Learn RF Keypad*, and then select the new keypad number (*RF Keypad 1* to *4*) and press **OK**. The panel starts the learning-in procedure, and the *Learn-in Mode* message is displayed.

4. Insert the batteries into the new wireless keypad. It starts the keypad initialization process.

   Note: If the wireless keypad is not brand new (i.e. it was already used with another system), it must be re-programmed (flashed) first to erase any previous keypad settings, otherwise it will not initialize the learning mode (see *Chapter B11 Updating firmware* on page 255).

5. On the new keypad, select a language from the list with the ↑↓ keys and press **OK**.
6. Select default settings from the *Load Country Defaults* list with the ↑↓ keys and press **OK**.
7. At the *Partition Number* prompt, type the partition number and press **OK**.
8. At the *Keypad Number* prompt, type the keypad number and press **OK**.
9. At the *SysID-KID1-KID2* prompt, 3 values need to be entered:
   - **SysID**: this value represents the System ID or a 3 digit code which should be unique for this panel.
   - **KID1**: this value represents Keypad ID 1 and contains the first 3 digits of the code which should be unique for this wireless keypad.
   - **KID2**: this value represents Keypad ID 2 and contains the last 3 digits of the code which should be unique for this wireless keypad. Each of these three values must range from 001 to 255. If any typed value is incorrect, the keypad displays the blank *SysID-KID1-KID2* prompt again. The combination of unique panel and wireless keypad identifiers is required in order a wireless keypad is to communicate with the appropriate panel only. In case multiple wireless keypads are used on the same panel, each wireless keypad should have different KID1 and KID2 values.
10. At the *EncKey* prompt, enter a 24-digit encryption key and press **OK**. This encryption key is to secure the wireless communication link between the panel and wireless keypad(s) and is unique for each panel. Any 24-digit value can be entered. The same encryption key must be entered when successive wireless keypads are enrolled.
11. The new keypad communicates with the panel and sends data entered in steps 5 to 10. The *Learn-in Mode* message displays briefly.
12. The new keypad is learned-in and displays the *Programming in Progress* message. To clear this message you have to exit programming mode on the first keypad.

Important: You should not program zero-only strings (for example, "000") as values for SysID, KID1, KID2 nor Encryption Key, as it will make the keypad non-operational.

Note: If the learned-in keypad's configuration stored in the RF receiver, differs from the actual keypad's configuration, the RF receiver will start the configuration copying process. It takes a couple of seconds, and during this process the keypad displays the "Copying" message. During this operation, due to an intensive radio communication, you should not perform any additional actions on other wireless keypads.

Deleting wireless keypads

You can delete wireless keypads from the system. The following example deletes the wireless keypad number 2.

1. Using the other keypad, enter the programming mode, navigate with the ↑↓ keys to *RF Receivers* and press **OK**.
2. Select the *RF Receiver 32* and press **OK**.

3. Select *Del. RF Device>Del. RF Keypad*, and then select the keypad number of the keypad you want to delete (*RF Keypad 2*) and press **OK**.
4. The keypad number 2 is deleted, and all its programming information is removed from memory.

Note: You cannot delete the currently used wireless keypad (the one used for programming).

Note: After deleting the wireless keypad, you have to default it to clear any existing settings. To do this, press F1+6+Down Arrow simultaneously for a few seconds. The wireless keypad can only be brought back to defaults (to initiate the startup process) if it is not in the range of an active NetworX V3 panel, i.e. the signal strenght icon must show X.

Learning-in IO modules

In order to add a wireless siren or IO module to the system perform the following steps:

1. Enter the programming mode on the keypad, navigate with the ↑↓ keys to *RF Receivers* and press **OK**.

Note: It is recommended to not learn any devices from a keypad which belongs to a partition different then Partition 1.

2. Select the relevant module bus ID and press **OK**. For example, you can select *RF Receiver 32*, which is a built-in receiver on the NetworX V3 panel board.
3. Select *Learn RF Device>Learn Siren/IO*, and then select the new siren/IO module number (*Siren/IO 3 to 4*) and press **OK**.
4. Select *Internal Siren* and press **OK**.The panel starts the learning-in procedure, and the *Learn-in Mode* message is displayed on the keypad(s).
5. Power-up the IO module by connecting a battery pack or inserting batteries (consult the device's manual for details).
6. Wait until the LED on the IO module board blinks for 0.5 second.
7. Trip the IO module tamper switch, simulating the closing of the housing for at least 0.5 second and maximum of 5 seconds, and release the tamper again.
8. The LED on the IO module will blink for 1 second, ant the keypad beeps once to confirm the module is programmed.
9. The IO module is learned-in. Close the IO module housing.

Note: You can delete an IO module using the *Del. RF Device* menu option.

Learning-in wireless sirens

In order to add a wireless siren to the system perform the following steps:

1. Enter the programming mode on the keypad, navigate with the ↑↓ keys to *RF Receivers* and press **OK**.

Note: It is recommended to not learn any devices from keypad which belongs to a partition different then Partition 1.

2. Select the relevant module bus ID and press **OK**. For example, you can select *RF Receiver 32*, which is a built-in receiver on the NetworX V3 panel board.

3. Select *Learn RF Device> Learn Siren/IO*, and then select the new siren number (*Siren/IO 1* to *4*) and press **OK**.
4. Depending on the siren type, select *Internal Siren* or *External Siren* and press **OK**. The panel starts the learning-in procedure, and the *Learn-in Mode* message is displayed on the keypad(s).
5. Power-up the IO module in the siren with tamper open by connecting a battery pack or inserting batteries (consult the siren's manual for details).
6. Wait until the LED on the IO module board blinks for 0.5 second.
7. Trip the siren's tamper switch, simulating the closing of the housing for at least 0.5 second and maximum of 5 seconds, and release the tamper again.
8. The LED on the IO module will blink for 1 second, and the keypad beeps once to confirm the siren is programmed.
9. The siren is learned-in. Insert the batteries powering the siren, if necessary, and close the siren housing.

Any new IO module is learned-in by default as a universal siren, i.e. its both outputs are triggered by the *Any Siren* event. In order to program it as a burglary-only or a fire-only siren you have to select appropriate triggering event (i.e. *Burglary Siren* or *Fire Siren*) under *RF Receivers>RF Receiver 32>Outputs>I/O x Output y>Event.*

Note: For a detailed description of the steps required to install the particular siren, see the siren's installation manual.

Note: You can delete a siren using the *Del. RF Device* menu option.

Configuring receiver features

Configurable receiver features include tampers and communication errors. The following example enables RF jamming detection on RF receiver 32. RF communication is considered to be jammed when there has been a jamming signal for more than 30 seconds in a 60 second window.

1. Navigate with the ↑↓ keys to *RF Receivers>RF Receiver 32>Receiver Features* and press **OK**.
2. Scroll to *Jam Detection>Enabled* and press **OK**.
3. The keypad beeps once to accept the change and returns to *Jam Detection*.

Configuring IO modules

The I/O module is a PCB-only device, which can be connected to any application, thus allowing the application to be controlled through a wireless link. The application to be controlled must have a power supply of its own. One important application for the I/O module is the wireless siren/beacon, which has its own battery pack to operate on while using the I/O module for wireless control and supervision (see *Installing the wireless sirens* on page 33).

The I/O module and its batteries must be located inside the tamper-protected housing of the application it controls and supervises. Opening of this housing is reported to the panel as a tamper condition.

Any new IO module is learned-in by default as a universal siren, i.e. its both outputs are triggered by the *Any Siren* event. In order to assign another trigger, you have to select an appropriate event under *RF Receivers>RF Receiver 32>Outputs>I/O x Output y>Event.*

You can program the event triggering a particular output, set time the output is on (in minutes or seconds, or until the user code is entered), and assign user permissions to activate outputs. The following example sets the event triggering the output 1 on the IO module 3 as *Not Ready to Arm*. The partition selected to trip this output is partition 1. The output is switched on for 6 minutes.

1. Navigate with the ↑↓ keys to *RF Receivers>RF Receiver 32>Outputs* and press **OK**.
2. Scroll to *I/O 3 Output 1* and press **OK**.
3. Select *Event>Not Ready to Arm* and press **OK**.
4. The keypad beeps once to accept the change and returns to *Event*.
5. Navigate with the ↑↓ keys to *Time Unit* and press **OK**. Select *Minutes* and press **OK**.
6. The keypad beeps once to accept the change and returns to *Time Unit.*
7. Navigate with the ↑↓ keys to *Time,* enter **6** and press **OK**.
8. The keypad beeps once to accept the change and returns to *Time.*
9. Navigate with the ↑↓ keys to *Partitions* and press **OK**. Select partition **1** only and press **OK**.
10. The keypad beeps once to accept the change and returns to *Partitions*.

Note: Activation time of the external siren can be between 3 and 15 minutes.

The following example sets the event that switches on the output 2 on the IO module 4 as *Follow X10 Commands*. The IO module behaves then like a standard X10 device. The X10 unit code assigned to this output is 5 and the X10 house code is P.

1. Navigate with the ↑↓ keys to *RF Receivers>RF Receiver 32>Outputs* and press **OK**.
2. Scroll to *I/O 4 Output 2* and press **OK**.
3. Select *Event>Follow X10 Commands* and press **OK**.
4. The keypad beeps once to accept the change and returns to *Event*.
5. Navigate with the ↑↓ keys to *X10 Address>Unit Code*, enter **5** and press **OK**.
6. The keypad beeps once to accept the change and returns to *Unit Code*.
7. Navigate with the ↑↓ keys to *X10 Address>House Code*, scroll to **P** and press **OK**.
8. The keypad beeps once to accept the change and returns to *House Code*.

The list of events that can be selected during IO module programming is as follows:

Table 22. RF receiver output events

Nr.	Event	Nr.	Event	Nr.	Event
0**	Burglary alarm	**18**	Entry	**26**	Fire trouble
1**	Fire alarm	**19**	Exit	**45****	Code entry
2**	24 hour alarm	**20**	Entry or exit	**46**	Key FOB function 1
4**	Tamper Alarm	**21**	Armed	**47**	Key FOB function 2

Nr.	Event	Nr.	Event	Nr.	Event
5	Yelping Siren (Burglary)	22	Disarmed	56	Follow X-10 commands
6	Steady Siren (Fire)	23	Ready to arm	59	Armed in STAY mode
7	Any siren	24	Not ready to arm		
17	Alarm memory	25	Fire		

** If set to follow condition, these events are one second.

Note: Events related to a zone alarm are recognized by the event code stored in zone configuration. Therefore events 0 to 4 require correct zone configuration to work as expected (particularly *Control Panel>Communications>Reporting>Report Codes>Zone Types* must be set correctly). For example, in order for a 24 hour alarm zone to trigger an IO module, the report code must be set to 6 (24 Hour Burglary) or 9 (24 Hour Non Burglary).

Note: Partition number stored with the alarm event is the first partition the triggered sensor belongs to. So if the sensor belongs to partitions 1-4 the partition number sent with the event will be 1. It should be taken into consideration when setting up multi-partition sensors.

IO modules can be also triggered by keyfob buttons. This way you can turn on and off some external device or activate a wireless siren. To do this you must activate the switch output functionality for the keyfob, and correctly set the event triggering the selected output on the particular IO module. The following example configures the button 1 on the keyfob (light bulb button), to allow it to toggle the output 1 on the I/O module 4 ON and OFF.

Note: Output cannot be latched when this functionality is enabled (i.e. *RF Receiver 32>Outputs>I/O 4 Output 1>Attributes>Output Latched* **MUST** be set to NO), otherwise after triggering output with the keyfob you will not be able to switch it off with the keyfob.

Note: If the user wants to use the bulb button at the 4-button keyfob to arm the system then the Quick Arm menu option and approprite partitions must be enabled.

1. Navigate with the ↑↓ keys to *RF Receivers>RF Receiver 32>Inputs* and press **OK**.
2. Scroll to the correct *Sensor n* (where the keyfob is already programmed) and then select *Keyfob>Keyfob Funct 1* and press **OK**.
3. Scroll to *Switch Output 1* and press **OK**. The keypad beeps once to accept the change and returns to *Keyfob Funct 1*.
4. Navigate with the ↑↓ keys to *RF Receivers>RF Receiver 32>Outputs* and press **OK**.
5. Scroll to *I/O 4 Output 1* and press **OK**.
6. Select *Event>Keyfob Funct 1* and press **OK**.
7. The keypad beeps once to accept the change and returns to *Event*.
8. Navigate with the ↑↓ keys to *I/O 4 Output 1>Time,* enter **0** and press **OK**.
9. The keypad beeps once to accept the change and returns to *Time.*
10. Navigate with the ↑↓ keys to *I/O 4 Output 1>Partitions* and press **OK**. Select partition **1** only and press **OK**.
11. The keypad beeps once to accept the change and returns to *Partitions*.
12. Navigate with the ↑↓ keys to *I/O 4 Output 1>Attributes>Output Latched* and press **OK**. Select **No** and press **OK**.
13. The keypad beeps once to accept the change and returns to *Output Latched*. The *Code Stops Timer* option is ignored in this case, so it does not have to be set.

After the siren/IO module is learned-in you need to set up threshold values and turn the antipassivation feature ON, if necessary. Lithium cells require regular exercising to prevent electrode passivation, which leads to an increase of the internal cell resistance. Antipassivation is a function that avoids formation of this passivation layer. The following example sets the threshold low battery value to 30 x 0.1 V, threshold low auxillary voltage to 98 x 0.1 V and turns the antipassivation feature ON for the RF siren/IO module 1.

1. Navigate with the ↑↓ keys to *RF Receivers>RF Receiver 32>Sirens/IO Features* and press **OK**.
2. Scroll to *RF Siren/IO 1* and press **OK**.
3. Scroll to *Threshold* and press **OK**.
4. Scroll to *Low Battery* and press **OK**. Set the low battery threshold to **30 x 0.1 V** with the ↑↓ keys and press **OK**. The keypad beeps once to accept the change and returns to *Low Battery*.
5. Scroll to *Low Aux Voltage* and press **OK**. Set the low auxillary voltage threshold to **98 x 0.1 V** with the ↑↓ keys and press **OK**. The keypad beeps once to accept the change and returns to *Low Aux Voltage*.
6. Navigate with the ↑↓ keys to *Sirens/IO Features>RF Siren/IO 1>Antipassivation* and press **OK**.
7. Select *Enabled* and press **OK**.
8. The keypad beeps once to accept the change and returns to *Antipassivation*.

Recommended settings depend on the type of application the IO module is used for, and are as follows:

Application		Low Battery Trip	Antipassivation
Outdoor Siren	Operational battery	3.0 V	Enabled
	Siren battery	9.8 V	
Indoor Siren	Operational battery	2.3 V	Disabled
	Siren battery	9.0 V	
Standalone IO module	Operational battery	2.3 V	Disabled

Setting supervision windows

There are three wireless supervision options: Short Window, Normal Window and Fire Window. The PIR sensor and door/window sensors follow the short and normal supervision windows.

- If a PIR or door/windows sensor does not report within the time specified in Short Window, the system does not allow the user to arm the system.
- If a PIR or door/windows sensor does not report within the time specified in Normal Window, an RF Sensor Lost condition is reported to the central station and a service message is displayed on the keypad.

868 MHz transmitters typically report every 20 minutes.

Note: If you are installing a system in Holland or Belgium, you must set the supervision values to 2 hours as long supervision window. Set the short supervision window in Belgium and Holland to 24 minutes. Fire transmitter supervision windows should be set to 4 hours.

Smoke detectors follow the fire window. 868 MHz smoke sensors report every 64 minutes. Smoke detectors follow the fire supervision window only and report to the central station when not reporting within the fire window.

On the wired keypad the RF Zone Lost event is signalized by three beeps every 5 minutes. On the wireless keypad the RF Zone Lost event is signalized after 15 seconds from the wake up and then every 5 minutes from the last signal if the keypad is in the active mode. Please be aware, that entering a valid code (for example arming/disarming) suppresses beep signalling for 12 hours. This functionality depends also on the "Beep on RF loss" menu option (see *Glossary* in the keypad chapter).

Testing wireless sensors

The Remote Signal Strength Indication Value (RSSI) is a measure of the RF reception and is similar to the indication on a mobile phone. The value is linked to the level of the signal between the wireless sensors and the RF receiver. On an 868 MHz system, the RF receiver stores the signal strength of the transmission it receives from the sensor in a specified zone. The values in this zone are read as follows:

- Values over 105: The sensor will not work properly and must be moved to another location.
- Values between 105 and 90: The sensor will work but ideally should be moved to another location.
- Values between 90 and 80: These are low values but the sensor will still work properly.
- Values between 80 and 50: These are normal working values for sensor located at a longer distance from the receiver.
- Values smaller than 50: Perfect conditions.

RSSI Values may change due to environmental circumstances, for example, additional furniture or metal constructions. The following example tests the RSSI value of zone 2 on receiver 32.

1. Navigate with the ↑↓ keys to *RF Receivers>RF Receiver 32* and press **OK**.
2. Scroll to *RSSI RF Device> RF Sensors>RF Zone 2* and press **OK**.
3. The RSSI value is displayed on the keypad.

The following example tests the RSSI value of the RF keypad 3 on receiver 32.

1. Navigate with the ↑↓ keys to *RF Receivers>RF Receiver 32* and press **OK**.
2. Scroll to *RSSI RF Device> RF Keypads>RF Keypad 3* and press **OK**.
3. The RSSI value is displayed on the keypad.

The following example tests the RSSI value of the RF siren/IO module 2 on receiver 32.

1. Navigate with the ↑↓ keys to *RF Receivers>RF Receiver 32* and press **OK**.
2. Scroll to *RSSI RF Device> RF Sirens/IO>Siren/IO 2* and press **OK**.
3. The RSSI value is displayed on the keypad.

Disabling wireless sensors

You can program a receiver to disable a wireless sensor. This does not remove the sensor identification from the module's memory. The wireless sensor can be reactivated later or a new sensor can be learned into the zone. The following example removes sensor 10 learned in on receiver 32.

1. Navigate with the ↑↓ keys to *RF Receivers>RF Receiver 32* and press **OK**.
2. Scroll to *Inputs>Sensor 10>Enabled>No* and press **OK**.
3. The keypad beeps once to accept the change and returns to *Enabled*.

Glossary

Term	Definition
1 Pulse On	A menu entry that groups options enabling/disabling a single siren pulse at arming or at the exit delay expiration. This options work for the following output events only: Any siren, Burglary siren, Burglary alarm, 24 hour alarm.
Antipassivation	A menu entry that enables/disables the siren's battery antipassivation feature. When enabled, a small current flows through IO module output 2 every 30 seconds in order to improve the siren's battery life.
Attributes	A menu entry that groups additional configuration options for IO modules.
Code Stops Timer	A menu option that specifies the way entering code by the user affects the way the output is timed. If set to *Yes*, the output should be reset if a code is entered while it is being timed. When set to *No*, the output stays timed (not reset) after a code is entered. **Note**: Do not set up this option for system status events (such as "Ready to Arm", "Not Ready to Arm", "Armed", "Disarmed") because once the output is triggered it will not reset to reflect current status unless the user code is entered.
Del. RF Device	A menu entry that groups entries related to deleting RF devices from the system.
Del. RF Keypad	A menu entry that allows to delete the selected RF keypad.
Del. RF Sensor	A menu entry that allows to delete the selected RF sensor (zone).
Del. RF Sir/IO	A menu entry that allows to delete the selected RF siren or IO module.
Door/Window	A *RF Receiver* menu option that configures door/window settings on an RF receiver. It includes the use of internal reed and additional external contact of the door/windows transmitters.
Enabled	A menu entry that enables/disables the selected sensor.
Event	Selects the event that will trigger the output. See *Table 22* for the specific events that can be selected.

Term	Definition
External Contact	A menu option on an RF door/window sensor that enables an additional external contact. When the external contact is triggered, an alarm is generated on the same zone number as the door/window sensor (reed contact) itself.
Fire Supervision	A menu option that specifies that the receiver uses the fire supervision timing window.
Fire Window	A menu option that specifies the RF supervision to be used for RF smoke/fire detectors. The RF smoke/fire detectors send a supervision every 64 minutes.
Global Siren	A menu option that specifies whether the output is triggered on events that cannot be assigned to a partition, for example, an expander tamper. If there is a Siren On flag on any partition, the Global Siren flag is not tested.
House Code	A menu option that sets the code used to identify a particular premises. It is necessary in case any neighbouring premises also has an X-10 home automation system. More information on the X-10 home automation system can be found at www.x-10europe.com.
I/O Output User Auth.	When activating outputs with a user code (event 45), this option can be used to restrict certain codes from activating certain outputs.
Inputs	A menu entry that groups options relating to RF zones only.
Internal Reed	A menu option on an RF door/window sensor that enables the internal reed contact.
Jam Detection	A menu option that enables the detection of RF jamming.
Keyfob	A menu entry that groups options relating to any device that sends commands by a wireless receiver.
Keyfob Disarming	When this option is set to Normal (loc 193 bit 6) user can arm and disarm using keyfob buttons. When this option is set to Restricted user can arm, but can disarm only during entry time or when partition is part-armed.
Keyfob Funct 1	A menu option that enables the light bulb button on the keyfob for the selected RF zone on the selected RF receiver. If this option is enabled, pressing the light bulb button sends a keyfob function 1 event. Control panel auxiliary outputs and NX-507E/NX-508E outputs can be programmed to respond to this event. If this option is disabled, pressing the light bulb button starts the Arm Away mode. **Note:** It is an equivalent of Option 1 (above) and it can be set in either place.
Keyfob Funct 2	A menu option that enables the * button on the keyfob for the selected RF zone on the selected RF receiver. If this option is enabled, pressing the * button sends a keyfob function 2 event. Control panel auxiliary outputs and NX-507E/NX-508E outputs can be programmed to respond to this event. If this option is disabled, pressing the * button starts the Arm Stay mode. **Note:** It is an equivalent of Option 2 (above) and it can be set in either place.

Term	Definition
Keyfob User ID	A menu option that makes the keyfob report as the zone that it is learned into. When this option is disabled, all keyfobs report their open/closing reports as user 99.
Learn RF Keypad	A menu command that triggers the learn-in mode for the RF keypad.
Learn RF Sir/IO	A menu command that triggers the learn-in mode for the siren or IO module.
Learn RF Zone	A menu command that triggers the learn-in mode for the RF zone (sensor).
Learn-RF Device	A menu option that enables the mode in which a new wireless device is enrolled on the system.
Log Event	A menu option that specifies whether the output switching on and off is logged.
Model	A menu option that displays the model of the selected receiver.
Normal Window	A menu option that specifies the normal supervision window for RF devices. RF devices on 868 MHz typically report every 15 minutes. Depending on the country regulations, this timer must be set to specific values.
Option 1	A menu option used for configuring a sensor. For actual setting description, see the particular sensor manual. For example, in case of a keyfob it enables the keyfob function 1 (see below).
Option 2	A menu option used for configuring a sensor. For actual setting description, see the particular sensor manual. For example, in case of a keyfob it enables the keyfob function 2 (see below).
Option 3	A menu option used for configuring a sensor. For actual setting description, see the particular sensor manual.
Output Latched	A menu option that specifies the way the output is timed. If set to *Yes*, the output will latch until a code is entered. When set to *No*, the output is timed according to *Time* setting. **Note**: Do not set up this option for system status events (such as "Ready to Arm", "Not Ready to Arm", "Armed", "Disarmed") because once the output is triggered it will not reset to reflect current status unless the user code is entered.
Outputs	A menu entry that groups programmable options for IO modules.
Partitions	A menu entry that lists the partitions assigned to the selected keyfob. The selected keyfob can trigger an event on these partitions. A zone may reside in any combination of partitions. A zone that resides in more than one partition becomes a common zone and is reported to its lowest partition number. A common zone is armed only when all the partitions that it belongs to are armed. It is disarmed the moment one of the partitions it belongs to is disarmed.
Partitions	Selects the partition(s) that will trigger the output when the event occurs in these partition(s).

Term	Definition
Receiver Features	A menu entry that groups programmable options for RF receivers.
Reset Settings	A menu option that defaults the selected receiver to factory defaults.
RF Keypads	A menu entry that displays the RSSI value for the selected wireless keypad.
RF Receiver 32	A menu entry that groups all options for the selected RF receiver. The integrated NetworX V3 RF receiver has ID 32.
RF Sensors	A menu entry that displays the RSSI value for the selected wireless zone.
RF Sirens/IO	A menu entry that displays the RSSI value for the selected wireless siren or IO module.
RSSI RF Device	A menu entry that groups entries related to measuring RF signal strengths.
Sequential Programming	A menu option that allows a group of RF sensors to be enrolled in sequence. Once the first sensor (Start Learning sensor) is configured, the detectors are learned-in in sequence. The value of 'Start Learning' is increased automatically. This option allows easier programming.
Short Window	A menu option that specifies the short supervision window for RF devices. RF devices on 868 MHz typically report every 15 minutes. Depending on the country regulations, this timer must be set to specific values.
Sirens/IO Features	A menu entry that groups troubleshooting options for IO modules.
Smoke	A menu entry that groups smoke sensor options.
Start Zone	A menu option that specifies the first zone number of zones on the RF receiver. **Note:** In case of the RF Receiver 32 (the NetworX V3 built-in 868MHz Gen2 receiver), this option is not visible. In the NetworX V3 system, you can set this value for additional RF receivers only. For the receiver 32 the starting zone is always zone 1.
Supervised	A menu option that enables supervision of the selected RF sensor.
Supervision	A menu entry that groups wireless supervision options.
Switch to EN	A menu option that switches the RF receiver to the EN 50131-compatible settings. For additional information about the EN 50131 norm, see Appendix 7.
System ID	A menu entry that allows to set the SysID value. System ID is a 3 digit code which should be unique for the panel.
Tamper	A menu option that enables/disables the tamper of a smoke sensor.
Threshold	A menu entry that allows to set the Low Battery threshold and the Low Aux Voltage threshold for the particular IO module/siren.
Time	Selects the amount of time an output will remain activated when an output triggers. If this location is programmed as a zero, the output will follow the particular event (latched).

Term	Definition
Time Unit	A menu option that specifies the time unit (set in *Control Output Events>Time* option) as minutes or seconds.
Traceability	A menu entry that groups additional information, like serial number, manufacture date, and firmware revision for the particular IO module/siren.
Traceability	A menu entry that groups additional information, like serial number, manufacture date, and firmware revision.
Unit Code	A menu option that sets the X-10 unit number used to identify a particular X-10 device on the selected module.
Version	A menu option that displays the current software version of the selected receiver.
Voltage Level	A menu entry that displays battery voltage level and auxiliary voltage level for the particular IO module/siren.
Wake On Entry Timer	When this option is set to Enabled, all the wireless keypads get active on Entry Timer start, i.e. they wake up from the sleep mode in order to indicate it . When this option is set to Disabled, keypads do not wake up.
Wake On Exit Timer	When this option is set to Enabled, all the wireless keypads get active on Exit Timer start, i.e. they wake up from the sleep mode in order to indicate it. When this option is set to Disabled, keypads do not wake up.
Wake On Pulsing Buzzer	When this option is set to Enabled, all the wireless keypads get active on Pulsing Buzzer, i.e. they wake up from the sleep mode in order to emit it. When this option is set to Disabled, keypads do not wake up, and sound is not emitted. Please note, that also other keypad settings can affect whether the acoustic signal is actually emitted or not, for example, *Keypad Features>Silent Keypad*.
Wake Up On Chime	When this option is set to Enabled, all the wireless keypads get active on Chime, i.e. they wake up from the sleep mode in order to emit it. When this option is set to Disabled, keypads do not wake up, and chime is not emitted. Please note, that also other keypad settings can affect whether the acoustic signal is actually emitted or not, for example, *Keypad Features>Silent Keypad*.
X-10 Address	A menu entry that groups X-10 configuration options for IO modules.
Zone/User	Selects the zone or user number necessary to trigger an output. If this location is programmed as a zero (“0”), any zone or user will activate the output (see also location 68). The zone/user filter is active only for following events: *Burglary Alarm, Fire Alarm, 24h Alarm, Zone Tamper* (it filters out zones for all these events), and *Code Entry* (it filters out users). For all other events this setting is ignored.

Programming locations for the RF receivers

In the *Table 23* you can find list of locations related to the output events. Please note, that descriptions for locations 70, 71 and 72 given below for the output 1, pertain also to the respective locations for the outputs 2 to 8.

Table 23. RF receiver location map – locations related to output events.

Output	Location	Segment	Type	Description	IO module
1	70	1	dec value	Event number	IO module 1
		2	dec value	Zone / user number	
		3	dec value	Time	
	71	1	option	Special configuration	
		2	option	Partition	
	72	1	hex value	X-10 unit code	
		2	hex value	X-10 house code	
2	73	1	dec value	Event number	
		2	dec value	Zone / user number	
		3	dec value	Time	
	74	1	option	Special configuration	
		2	option	Partition	
	75	1	hex value	X-10 unit code	
		2	hex value	X-10 house code	
3	76	1	dec value	Event number	IO module 2
		2	dec value	Zone / user number	
		3	dec value	Time	
	77	1	option	Special configuration	
		2	option	Partition	
	78	1	hex value	X-10 unit code	
		2	hex value	X-10 house code	
4	79	1	dec value	Event number	
		2	dec value	Zone / user number	
		3	dec value	Time	
	80	1	option	Special configuration	
		2	option	Partition	
	81	1	hex value	X-10 unit code	
		2	hex value	X-10 house code	
5	82	1	dec value	Event number	IO module 3
		2	dec value	Zone / user number	
		3	dec value	Time	
	83	1	option	Special configuration	
		2	option	Partition	
	84	1	hex value	X-10 unit code	
		2	hex value	X-10 house code	
6	85	1	dec value	Event number	
		2	dec value	Zone / user number	

Output	Location	Segment	Type	Description	IO module
	86	3	dec value	Time	
		1	option	Special configuration	
		2	option	Partition	
	87	1	hex value	X-10 unit code	
		2	hex value	X-10 house code	
7	88	1	dec value	Event number	IO module 4
		2	dec value	Zone / user number	
		3	dec value	Time	
	89	1	option	Special configuration	
		2	option	Partition	
	90	1	hex value	X-10 unit code	
		2	hex value	X-10 house code	
8	91	1	dec value	Event number	
		2	dec value	Zone / user number	
		3	dec value	Time	
	92	1	option	Special configuration	
		2	option	Partition	
	93	1	hex value	X-10 unit code	
		2	hex value	X-10 house code	

LOCATION 70 - PROGRAMMING THE EVENT, USER/ZONE AND TIME FOR OUTPUT 1 (3 segments, numerical data)

Segment 1 - Event

Selects the event that will trigger the output. See chart below for the specific events that can be selected.

Segment 2 - Zone/user

Selects the zone or user number necessary to trigger an output. If this location is programmed as a zero (“0”), any zone or user will activate the output (see also location 68). The zone/user filter is active only for following events: *Burglary Alarm, Fire Alarm, 24h Alarm, Zone Tamper* (it filters out zones for all these events), and *Code Entry* (it filters out users). For all other events this setting is ignored.

Segment 3 - Time

Selects the amount of time an output will remain activated when an output triggers. If this location is programmed as a zero, the output will follow the particular event.

LOCATION 71 - PROGRAMMING SPECIAL FUNCTIONS AND PARTITIONS FOR OUTPUT 1 (2 segments, feature selection data)

Segment 1 - selects the following special conditions

Option		Function
1	ON	If output should time in minutes
	OFF	If output times in seconds
2	ON	Output "Latch": should latch until a code is entered
	OFF	Output is timed
3	ON	Timed or output should be reset if a code is entered while it is being timed
	OFF	Stays timed (not reset) after code is entered
8		Reserved

Segment 2 - selects the following partitions

Option		Function
1	ON	If the event should activate when it occurs in partition 1
2	ON	If the event should activate when it occurs in partition 2
3	ON	If the event should activate when it occurs in partition 3
4	ON	If the event should activate when it occurs in partition 4

LOCATION 72 - PROGRAMMING THE X-10 LOCATION FOR OUTPUT 1 (2 segments, numerical data)

Segment 1 - Unit code

Program a number from 0-15 to represent the corresponding X-10 unit code from the following table.

Module	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Segm 1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15

Segment 2 - House code

Program a number from 0-15 to represent the corresponding house code from the following table.

X-10 Location code (house code)			
0=A	4=E	8=I	12=M
1=B	5=F	9=J	13=N
2=C	6=G	10=K	14=O
3=D	7=H	11=L	15=P

LOCATIONS 150-159 - AUTHORIZING USERS 1 - 99 TO TRIGGER OUTPUTS 1 - 8 (10 segments, feature selection data)

When activating outputs with a user code (event 45), locations 150-159 can be used to restrict certain codes from activating certain outputs. Each location contains 10 segments. Segment 1 corresponds to user 1, segment 10 corresponds to user 10. The LED's correspond to outputs 1 - 8.

Location	Segments	Type	Function
150	10	option	AUTHORIZING USERS 1 - 10 TO TRIGGER OUTPUTS 1 – 8 Segment 1 – user 1, segment 2 – user 2 ..... segment 10 – user 10
151	10	option	AUTHORIZING USERS 11 - 20 TO TRIGGER OUTPUTS 1 – 8 Segment 1 – user 11, segment 2 – user 12 ..... segment 10 – user 20
152	10	option	AUTHORIZING USERS 21 - 30 TO TRIGGER OUTPUTS 1 - 8
153	10	option	AUTHORIZING USERS 31 - 40 TO TRIGGER OUTPUTS 1 - 8
154	10	option	AUTHORIZING USERS 41 - 50 TO TRIGGER OUTPUTS 1 - 8
155	10	option	AUTHORIZING USERS 51 - 60 TO TRIGGER OUTPUTS 1 - 8
156	10	option	AUTHORIZING USERS 61 - 70 TO TRIGGER OUTPUTS 1 - 8
157	10	option	AUTHORIZING USERS 71 - 80 TO TRIGGER OUTPUTS 1 - 8
158	10	option	AUTHORIZING USERS 81 - 90 TO TRIGGER OUTPUTS 1 - 8
159	10	option	AUTHORIZING USERS 91 - 99 TO TRIGGER OUTPUTS 1 - 8

Option		Function
1	ON	Code will activate Output 1
	OFF	Code will **NOT** activate output 1
2	ON	Code will activate Output 2
	OFF	Code will **NOT** activate output 2
3	ON	Code will activate Output 3
	OFF	Code will **NOT** activate output 3
4	ON	Code will activate Output 4
	OFF	Code will **NOT** activate output 4
5	ON	Code will activate Output 5
	OFF	Code will **NOT** activate output 5
6	ON	Code will activate Output 6
	OFF	Code will **NOT** activate output 6
7	ON	Code will activate Output 7
	OFF	Code will **NOT** activate output 7
8	ON	Code will activate Output 8
	OFF	Code will **NOT** activate output 8

Chapter B6 Setting up the GSM/GPRS module (NX-7002)

Overview

In case you want to add GSM/GPRS functionality to the panel, you need to use an NetworX V3 model which has the GSM/GPRS on-board or you need to add a separate NX-7002 module. Only one GSM/GPRS module can be used and will have module number 78. The GSM/GPRS module features include:

- Wireless event reporting.
- 12 configurable report destinations.
- Selectable reportable events from four partitions.
- Compatible with PSTN or ISDN reporting.
- PSTN/ISDN can be used as backup.
- SIA reporting using TCP/IP over GPRS.
- XSIA reporting using TCP/IP over GPRS.
- Contact ID reporting using TCP/IP over GPRS.
- Contact ID or SIA reporting formats over SMS.
- HomeText (plain language) SMS reporting.
- SIA reporting with optional partition modifiers using SMS messages.
- XSIA reporting using SMS text messages.
- Control panel can use GSM in addition to PSTN (reporting all panel protocols using GSM).
- Wireless upload/download using GSM CSD connection.
- Wireless upload/download using a GPRS connection.
- Upload/download may be initiated remotely or locally.
- Optional automatic download sessions. These normally follow test calls. Test call reporting can be switched off so that there is automatic download calls without test report calls.
- Provides backup for the panel and external dialers.

Enrolling the GSM/GPRS module

When you select the enrol modules process, the GSM/GPRS module is enrolled on both the control panel and the keypad. The keypad must enrol the module in order to display the relevant menu

options. To verify enrolling, check that the event log contains an enrol event for the GSM/GPRS module.

1. Press **OK** at the system prompt and enter your installer code.
2. Navigate with the ↑↓ keys to *Enrol Modules>Enrol* and press **OK**.
3. The keypad starts enrolling the modules. The *Enrolling Modules* message is displayed while enrolment is taking place (approximately 12 seconds).
4. When the modules have been enrolled, a beep sounds and the message disappears.
5. To verify the enrolled modules, navigate with the ↑↓ keys to *Maintenance Mode* and press **OK**.
6. Scroll to *Log Review* and press **OK**. When the control panel enrols a module, it adds an enrol event to the event log. This event contains the module number. Scroll through the event log to verify that the GSM/GPRS module has been enrolled (module ID 78).

Note: Each time you exit programming mode, the modem resets and restarts and reads the PIN number, network operator, SMS center number and any other information, from the configuration.

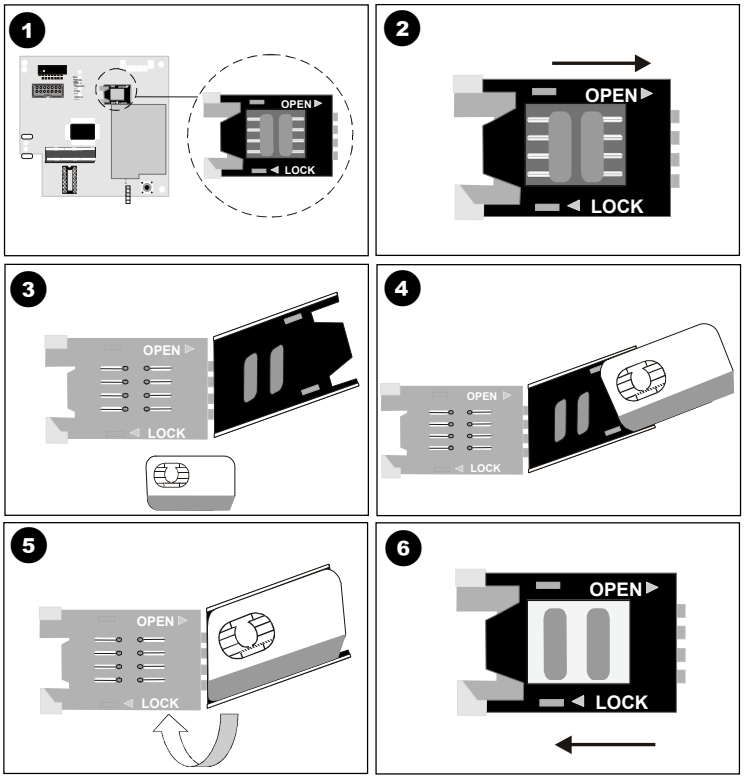
Enrolling the SIM card on the GSM network

1. Enter programming mode.
2. Select *NX-7002 Module>Options>GSM>SIM PIN Code* and press **OK**.
3. Enter the SIM PIN and press **OK**.
4. Exit programming mode. The SIM PIN is automatically enrolled on the GSM network.

Enrolling the SIM card on the GPRS network

1. Enter programming mode.
2. Select *NX-7002 Module>Options>GSM>SIM PIN Code* and press **OK**.
3. Enter the SIM PIN and press **OK**.
4. Obtain an Access Point Number from the supplier. Select *NX-7002 Module>Options>Network>GPRS APN* and enter it.
5. You may need to enter the PPP password and PPP user ID required by the network. To do this select *NX-7002 Module>Options>Network>User ID* and *NX-7002 Module>Options>Network>Password.* This step is not usually required.
6. Exit programming mode. The SIM PIN is automatically enrolled on the GSM network

Inserting a SIM card



CAUTION: You must be free of all static electricity when handling electronic components.

1. Power down the system before inserting the SIM Card.
2. Locate the SIM card holder ❶ on the board.
3. Open the SIM card holder by sliding the clip as shown in ❷ and lifting the holder.
4. The SIM card holder opens ❸.
5. Slide the SIM card into the holder using the guides. Make sure the contacts (gold pads) facing the circuit board and the angled corner face out ❹.
6. Make sure that the SIM card is placed properly in the holder and close the SIM card holder ❺.
7. Slide the clip back to the original position as shown in ❻.
8. Power up the system. Do not enter programming mode until the SIM card selects the network operator. The SIM card automatically selects a network operator when enrolled on the network. To manually select an operator, enter the relevant network operator in *GSM Operator>Operator Selection*. See *Appendix A* for a list of operator ID codes.

Most SIM cards contain a pre-programmed SMS service center address and under normal circumstances, this should not be changed. If you do need to change it, include the international country prefix using a '+' instead of leading zeros.

Testing the RSSI value

During the enrolling procedure, it is mandatory to check the RSSI value (signal strength) of the NX-7002 and record it in the system documentation. The RSSI value is linked to the signal level of the GSM network and ranges from 0-31, with 99 as unknown.

The RSSI value may change due to environmental circumstances, for example, additional furniture or metal constructions. If an RSSI reading is not satisfactory, move the antenna to get a better reception.

Table 24. RSSI values

Value	Explanation
Values between 1 and 4	The module will not work properly and must be moved to another location.
Values between 5 and 9	The module will work but ideally should be moved to another location.
Values between 10 and 16	These are normal working values for the module located at a longer distance from the receiver.
Values above 17	Perfect conditions.

1. Enter programming mode.
2. Select *NX-7002 Module>Options>GSM>RSSI Value* and press **OK**.
3. Note the RSSI reading.
4. Select *NX-7002 Module>Options>Status Check* and press **OK**.
5. Scroll through the status messages to ensure the SIM card is logged onto the GSM network and the SIM card PIN is not blocked. See Obtaining the GSM/GPRS module status on page 207 for more information on status messages.

Testing the GSM or GPRS connection

- You can test if the module is logged into the GSM network by selecting *NX-7002 Module>Options>Status Check>GSM Connection>Logged into GSM Network.*
- You can test if the module is logged into the GPRS network by selecting *NX-7002 Module>Options>GSM>Status Check>GPRS Connected.*

You can also check the **NETW** and **GPRS** LEDs on the NetworX V3 board.

Reporting LEDs

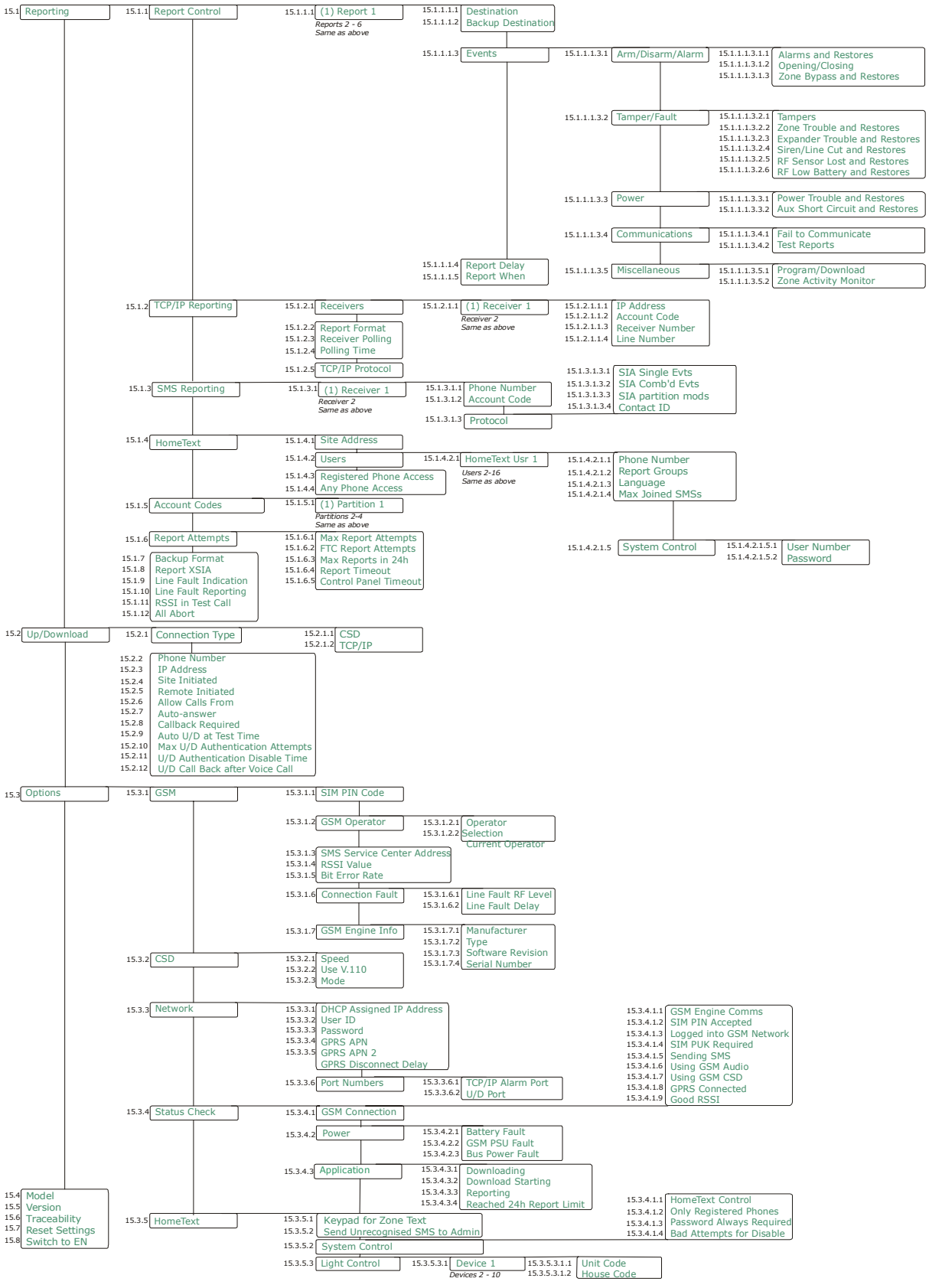
The LEDs located on the NetworX V3 board indicate the current status of the GSM/GPRS module.

- The flashing **BUS** LED indicates that the module is receiving messages over the bus rather than from the GSM/GPRS network.
- The **NETW** LED indicates that the GSM/GPRS module is currently using the GSM network (voice channel or CSD).
- The **GSM COM** LED indicates that the module is connected to the GSM network.

- The **SIM ERR** LED indicates that the SIM card is blocked and a PUK code is required to unblock it.
- The **GPRS** LED indicates that the module is connected to the GPRS network. This LED turns off when the module is no longer connected to the GPRS network, for example, when it uses the voice channel or CSD.
- The **REP** LED indicates that TCP/SMS reporting is taking place.
- The **PSU ERR** LED indicates that there is a problem with the 3.8 V Switched Mode Power Supply Unit (the modem power source is too low).
- The **GSM** LED indicates that the module is using the CSD channel.

Programming the GSM/GPRS module (NX-7002)

Figure 26. NX-7002 menu structure



You must enrol and default the GSM/GPRS module before you begin to program the system. For more information on enrolling and defaulting, see *Enrolling the system modules* on page 235. To program the GSM/GPRS module, select *Installer Menu>NX-7002 Module.*

Programmable options

You can program the module using a keypad or DL900 software. You can select the following:

- The reporting format to be used.
- The reporting destination.
- The reporting connection parameters.
- The reportable event selections.
- When reports are sent.
- The upload/download destination.
- The upload/download connection parameters.
- Download sessions during test calls.

Reporting

Overview

When an event occurs, depending on how the GSM/GPRS module is programmed, it is formatted as an XSIA, SIA or Contact ID event. It can then be sent out via TCP/IP or SMS.

- TCP/IP reporting can take place over a GPRS (PPP) network.
- SMS reporting can take place over a GSM network.

There are twelve configurable report destinations. SMS reporting can use a maximum of two, TCP/IP reporting can use a maximum of two and HomeText reporting can use a maximum of eight report destinations.

There are six configurable report controllers. Each report controller can be assigned a main and backup destination.

There are three reporting protocols, each is allocated a maximum number of instances.

Reporting protocol	Number of instances
SMS	2
TCP/IP	2
HomeText	8

The module can send primary, secondary and backup reports.

Important: Actual reports sent depend on both control panel report settings (*Control Panel>Communications>Reporting*) and GSM/GPRS module report settings (*NX-7002 Module>Reporting>Report Control*). For example, if the particular partition event, like Opening/Closing, is to be reported, it must be enabled at both *Control Panel>Communications>Reporting>Partition Rprt>Opening/Closing* and at *NX-7002 Module>Reporting>Report Control>Events>Opening/Closing*. The same applies to system reports, like *Box Tamper, Programming* or *Expander Trouble*.

HomeText

HomeText is a new report protocol that sends an SMS message of reported events to a telephone number. The Hometext reports are similar in appearance to the reports in the event log that are viewed on the keypad.

HomeText uses SMS messaging to send a report in a specified language. HomeText can use six reporting destinations.

Each report destination consists of:

- a primary reporting transport option (Hometext groups 1 - 8, SMS 1, SMS 2 etc.); and
- an event list.

HomeText can store up to 16 telephone numbers for reporting. Each telephone number can belong to any combination of the eight HomeText groups and must be assigned to one of the 12 available languages.

A HomeText group can be sent to one of the report destinations that report specified events. All telephone numbers belonging to a HomeText group will receive SMS messages of reported events for that group.

HomeText Control

HomeText allows the users to send and receive SMS messages from a mobile phone to control their security system.

Messages can consist of a registered telephone number assigned to the particular user, a password, commands and values.

- The telephone number part is necessary only if the system is configured to accept commands from unregistered phones, and the user calls from the telephone unknown to the system. If entering a phone number also a password is required. See the *Registered Phone Access* and the *Any Phone Access* menu option descriptions in the glossary.
- The system can be set up to always use a password. If so, a password must be entered before the command.
- Commands are instructions sent to the security system.
- Values are information that the user wants to send or receive from the system.

Note: More information on HomeText control can be found in *Reporting protocols and formats* section on page 209.

Report methods

SMS

You can send reports by SMS in SIA, XSIA, and Contact ID report formats. You can configure one event list for each report destination.

TCP/IP

You can send reports by TCP/IP in SIA, XSIA, and Contact ID report formats. You can configure one event list for each report destination

Report controllers

The GSM/GPRS module contains six report controllers. You can configure the events to be reported and specify two reporting destinations for each report controller. Two of these can be SMS, two can be TCP/IP. The backup destination, which is used if there is a reporting device problem, should be another reporting device, for example PSTN.

Setting up the report controllers

Each of the report controllers can be set up separately.

- Navigate with the ↑↓ keys to *NX-7002 Module>Reporting>Report Control >Report n* and press **OK** to select the report control you want to work on.
- Navigate with the ↑↓ keys to *NX-7002 Module>Reporting>TCP/IP Reporting>Report Format* and press **OK** to select the report format.
- Navigate with the ↑↓ keys to *NX-7002 Module>Reporting >SMS Reporting* to set up SMS.

Note: All events for Report 1 are enabled by default.

Primary and secondary reporting

Reporting for each report controller is done from the GSM/GPRS module or via another reporting device.

Primary Reporting

If the GSM/GPRS module is used for primary reporting, it acts as the main reporting device for the security system. You should:

- Navigate with the ↑↓ keys to *NX-7002 Module>Reporting>Report Control>Report n>Destination* and press **OK**.
- Enable the autotest report on the panel phone events and panel system events.
- Ensure the reporting format on the reporting device is the same as that set on the GSM/GPRS reporting device.

If the GSM/GPRS module is used for secondary reporting, another reporting device, for example a reporting device on the panel, is the primary reporting device. The GSM/GPRS module is only used as a reporting device if the primary reporting device fails. You should:

- Navigate with the ↑↓ keys to *NX-7002 Module>Reporting>Report Control>Report n>Backup Destination* and press **OK**.
- Ensure the reporting format on the reporting device is the same as that set on the GSM/GPRS module.

Secondary Reporting

The GSM/GPRS module acts as backup for another dialer. It reports the event when the control panel or other dialer fails to report.

GSM/GPRS module as backup (SMS / GPRS)

Control panel

The report control monitors the control panel and reports the selected events if the control panel fails to report them.

Set a report control to *Report When>Panel Dialer Problem*.

Program the first report destination and report format.

NX-590

The NX-590 is a TCP/IP auxiliary dialer. When it fails to report, it sends an expansion event, which the NX-7002 reports.

- Set a report control to *Report When>Report Always*.
- Enable Test Report events only.

Program the first report destination and ensure the NX-7002 report format is the same as that used by the NX-590.

GSM/GPRS module as backup (audio reporting)

Control panel

The control panel can send reports using GSM audio instead of PSTN. Alternatively, it can be configured to use both GSM audio and PSTN.

- Configure reporting on the control panel.
- Select *Installer Menu>Control Panel>System Settings>Feature Select>Miscellaneous>Use GSM If Line Trouble*.

Note: You can also program this by entering 'G' at the start of the phone number to use the GSM instead of the PSTN. Press #0 to enter 'G' on the keypad.
If you are programming the system using the DL900 software, enter 'A' at the start of the telephone number.

Control panel/ GSM/GPRS module as backup for the GSM/GPRS module

Backup reports are sent when the GSM/GPRS module fails to send primary reports. Backup reports can be sent by another report control on the module or by another device on the system.

Other report control of the GSM/GPRS module as backup

- Set a report control to *Report When>Report Always*.
- Program the first and backup report destinations to one of the TCP/IP or SMS destinations or set another report control as the report control backup destination.

Control panel as backup

When the GSM/GPRS module fails to report, it sends an expansion event which the control panel or auxiliary dialer reports.

- Select *NX-7002 Module>Reporting>Report Control>Report 1>Backup Destination>Other Dialer*
- Set a report control to *Report When>Report Always* on the panel.
- Enable the autotest report on the panel phone events and panel system events.
- Ensure the reporting format on the dialer is the same as that set in *NX-7002 Module>Reporting>Backup Format*.

GSM CSD connection (upload/download call back from audio)

GSM CSD connection is a feature that lets you upload/download without having to pay the extra cost of a CSD telephone number/service. Instead, you call in on the audio telephone number to begin an upload/download session.

Note: Use the DL900 version that supports GSM downloading.

To begin an upload/download session with the call back from audio feature enabled:

1. Select *NX-7002 Module>Up/Download>U/D Call Back after Voice Call>Yes* and press OK.
2. Call the GSM/GPRS module analog telephone number.
3. Between two and ten seconds cancel the call.
4. GSM/GPRS module waits for ten seconds and then starts an upload/download session.

To begin an upload/download session with the call back from audio feature enabled and using the NX-534E in combination with GSM/GPRS module:

1. Call the GSM/GPRS module analog telephone number.
2. GSM/GPRS module answers the call for the control panel and then hangs up.

3. After the hang up the NX-7002 starts an upload/download session.

Setting up polling

You can set up the GSM/GPRS module to report periodically to a receiver that it is still active. This is known as polling. Polling is more frequent than a daily test call but less frequent than continuous monitoring. If you configure a very short polling time, polling occurs very frequently and can generate large quantities of data. When setting the polling time, you should consider the speed of the GPRS network, possible connection delays and the cost of data transmission.

- Navigate with the ↑↓ keys to *NX-7002 Module>Reporting>TCP/IP Reporting>Receiver Polling,* select *On* and press **OK** to enable polling.
- Navigate with the ↑↓ keys to *NX-7002 Module>Reporting>TCP/IP Reporting>Polling Time* and enter the time in minutes *(0-255)* and press **OK** to set the TCP/IP polling time.

Upload/download

GSM CSD connection.

The upload/download access code is set on the control panel in *Communications>Up/Download>Download Access Code*. The following example configures the GSM/GPRS module GPRS module to answers calls from phone number 5666666 only. The PC initiates the upload/download session.

1. Navigate with the ↑↓ keys to *Up/Download>Connection Type>CSD*. This sets the connection type. This must be done before the phone number and IP address can be programmed.
2. Navigate with the ↑↓ keys to *NX-7002 Module>Up/Download* and press OK.
3. Scroll to *Remote Initiated>Enabled* and press **OK**.
4. The keypad beeps once to accept the change and returns to *Remote Initiated*.
5. Scroll to *Phone Number* and press **OK**.
6. Press #↓ to clear the current value.
7. Enter 5666666 and press **OK**.
8. The keypad beeps once to accept the change and returns to *Phone Number*.
9. Navigate to *Up/Download>Allow Calls From* and select *Known Phone Number*.
10. You must configure the GSM/GPRS module data phone number on the upload/download PC. Ask your network provider for this number.
11. You must also configure the GSM modem on the upload/download PC. Select *Program>Setup>GSM Modem setup*. Enter **S7=60S10=255X0T+MS=9,1,9600,9600** in the *Initialization string 2* field.

GPRS connection.

The connection is made via a TCP/IP network. Instead of a phone number, an IP address is set. The *Callback Required* and *Allow Calls From* options are ignored.

1. Navigate with the ↑↓ keys to *Up/Download>Connection Type>TCP/IP*. This sets the connection type and must be done before the phone number and IP address can be programmed.
2. Navigate with the ↑↓ keys to *NX-7002 Module>Up/Download>IP Address* and press **OK**.
3. Press #↓ to clear the current value.
4. Enter the IP Address and press **OK**.
5. Navigate with the ↑↓ keys to *NX-7002 Module>Options>Network>Port Numbers>U/D Port* and press **OK**
6. Select the U/D port and press **OK**.

Note: When GPRS reporting (TCP/IP) is set then is recommended to use the TCP/IP Up/Download (by default Up/Download is set to CSD). This will cause the 7002 to be connected to GPRS, and reporting will be faster and cheaper.

Reporting summary

The following table summarises the programming information required for different types of reporting.

Table 25. Reporting Summary

Report type	Information required	Menu Option
Contact ID over SMS	Phone Number	Select *NX-7002 Module>Reporting>SMS Reporting>Receiver n>Phone number.*
	Account code	Select *NX-7002 Module>Reporting>SMS Reporting>Receiver n>Account Code.*
	Protocol	Select *NX-7002 Module>Reporting>SMS Reporting>Receiver n>Protocol>Contact ID.*
	Destination	Select *NX-7002 Module>Reporting>Report Control>Report n>Destination>SMS1* or *SMS 2.*
	SMS Service Centre	Select *NX-7002 Module>Options>GSM>SMS Service Center Address.*
SIA over SMS	Phone Number	Select *NX-7002 Module>Reporting>SMS Reporting>Receiver n>Phone number.*
	Account code	Select *NX-7002 Module>Reporting>SMS Reporting>Receiver n>Account Code.*
	Protocol	Select *NX-7002 Module>Reporting>SMS Reporting>Receiver n>Protocol.* Select *SIA Separate*, *SIA Combined* or *SIA Partition Modified.*
	Destination	Select *NX-7002 Module>Reporting>Report Control>Report n>Destination>SMS1* or *SMS 2.*

Report type	Information required	Menu Option
	SMS Service Centre	Select *NX-7002 Module>Options>GSM>SMS Service Center Address.*
XSIA over SMS	Phone Number	Select *NX-7002 Module>Reporting>SMS Reporting>Receiver n>Phone number.*
	Account code	Select *NX-7002 Module>Reporting>SMS Reporting>Receiver n>Account Code.*
	Enable XSIA	Select *NX-7002 Module>Reporting>XSIA*
	Destination	Select *NX-7002 Module>Reporting>Report Control>Report n>Destination>SMS1* or *SMS 2.*
	Protocol	Select *NX-7002 Module>Reporting>SMS Reporting>Receiver n>Protocol.* Select *SIA Separate*, *SIA Combined* or *SIA Partition Modified.*
	SMS Service Centre	Select *NX-7002 Module>Options>GSM>SMS Service Center Address.*
XSIA over TCP/IP reporting	Destination	Select *NX-7002 Module>Reporting>Report Control>Report n>Destination>TCP/IP 1* or *2.*
	IP address	Select *NX-7002 Module>Reporting>TCP/IP Reporting>Receivers>Receiver n>IP Address.*
	Account Code	Select *NX-7002 Module>Reporting>TCP/IP Reporting>Receivers>Receiver n>Account Code.* **Note:** XSIA account numbers are 6 digits long.
	Receiver Number	Select *NX-7002 Module>Reporting>TCP/IP Reporting>Receivers>Receiver n>Receiver Number.*
	Line Number	Select *NX-7002 Module>Reporting>TCP/IP Reporting>Receivers>Receiver n>Line Number.*
	Enable XSIA	Select *NX-7002 Module>Reporting>XSIA*
	Protocol	Select *NX-7002 Module>Reporting>TCP/IP Reporting>Report Format>SIA.*
HomeText Reporting When HomeText reporting is enabled, you will receive SMS text messages about the alarm system status to your mobile phone.	Set the keypad from which zone and user names are obtained.	Select *NX-7002 Module>Options>HomeText>Keypad for Zone Text.*
	HomeText phone number	Select *NX-7002 Module>Reporting>HomeText>Users>HomeText User n>Phone Number.*
	HomeText system location	Select *NX-7002 Module>Reporting>HomeText>Site Address*
	HomeText	Select *NX-7002 Module>Reporting>HomeText>Users>HomeText User*

Report type	Information required	Menu Option
	language	*n>Language*
	HomeText Report groups	Select *NX-7002 Module>Reporting>HomeText>Users>HomeText User n>Report Groups*
	Send unrecognised text messages to the administrator.	Select *NX-7002 Module>Options>HomeText>Relay Unrecognised SMS to Admin.* **Note:** Phone 1 is the administrator phone.
HomeText Control When HomeText control is enabled, you can control your alarm system by sending SMS text messages from your mobile phone. **Note:** Set up phone 1 and then use the SMS commands to register more phones	User code	*User Menu>Users>User n>User Code* **Note:** In order to be recognized by the system, every HomeText user must have a valid user code configured in the control panel, otherwise the system will not accept a command. Any attempt to register, or set up, a HomeText user without assigned user code will cause sending the "Unauthorised, access denied" SMS message by the system.
	User number	*NX-7002 Module>Reporting>HomeText>Users>HomeText User n>System Control>User Number*
	Enable HomeText Control	Select *NX-7002 Module>Options>HomeText>System Control>Home Text Control>Enable.*
	Set up the user password	Select *NX-7002 Module>Reporting>HomeText>Users>HomeText User n>System Control>Password*
	The user must enter a password before sending a HomeText command	Select *NX-7002 Module>Options>HomeText>System Control>Password Always Required>Enable.*
	Commands are accepted only from HomeText phone numbers.	Select *NX-7002 Module>Options>HomeText>System Control>Only Registered Phones>Enable.*
	Allow the user to send HomeText commands from a registered phone only.	Select *NX-7002 Module>Reporting>HomeText>Registered Phone Access>Users n* **Note:** Only users included on this list are granted rights to send HomeText commands to the system. Removing a user from this list suspends all user's rights to send HomeText commands, including Any Phone Access privileges.

Report type	Information required	Menu Option
	Allow the user to send HomeText commands from any phone.	Select *NX-7002 Module>Reporting>HomeText>Any Phone Access>Users n* **Note:** Sending a HomeText message from the unregistered phone requires the following syntax: [Registered Phone Number] [password] command [values]
TCP/IP network connection	GPRS Access Point Number	Select *NX-7002 Module>Options>Network>GPRS APN.*
	PPP Login	Select *NX-7002 Module>Options>Network>User ID.*
	PPP Password	Select *NX-7002 Module>Options>Network>Password.*
	TCP/IP Alarm Port	Select *NX-7002 Module>Options>Network>Port Numbers>TCP/IP Alarm Port.* This should match the port number on the receiver side.
	Status Check	Select *NX-7002 Module>Options>Status Check>GSM Connection>GPRS Connected.*
TCP/IP reporting	Destination	Select *NX-7002 Module>Reporting>Report Control>Report n>Destination>TCP/IP 1* or *2.*
	IP address	Select *NX-7002 Module>Reporting>TCP/IP Reporting>Receivers>Receiver n>IP Address.*
	Account Code	Select *NX-7002 Module>Reporting>TCP/IP Reporting>Receivers>Receiver n>Account Code.* **Note:** SIA account numbers are 6 digits long. Contact ID account numbers are 4 digits long. Add leading zeros to create an 8-digit number.
	Receiver Number	Select *NX-7002 Module>Reporting>TCP/IP Reporting>Receivers>Receiver n>Receiver Number.*
	Line Number	Select *NX-7002 Module>Reporting>TCP/IP Reporting>Receivers>Receiver n>Line Number.*
	Protocol	Select *NX-7002 Module>Reporting>TCP/IP Reporting>Report Format>SIA.*
	Enable Polling	Select *NX-7002 Module>Reporting>TCP/IP Reporting>Polling Time.*
Up/downloading over GSM	GSM Data Phone Number	Select *NX-7002 Module>Up/Download>Phone Number.* **Note:** Use the DL900 version that supports GSM downloading.
	Allow Calls from	Select *NX-7002 Module>Up/Download>Allow Calls From.* **Note:** Only allows incoming data calls from specific phone numbers.
	Connection Type	Select *NX-7002 Module>Up/Download>Connection Type>CSD.*
Up/downloading over GPRS	GPRS IP address	Select *NX-7002 Module>Up/Download>IP Address.* **Note:** Use the DL900 version that supports GPRS downloading.

Report type	Information required	Menu Option
	U/D Port	Select *NX-7002 Module>Options>Network>Port Numbers>U/D Port.*
	Connection Type	Select *NX-7002 Module>Up/Download>Connection Type>TCP/IP.*
Voice channel	Phone Number	Select *Installer Menu>Control Panel>System Settings>Feature Select>Miscellaneous> Use GSM If Line Trouble* **Note:** This can only be used when the phone line monitor is enabled on the panel. If you want to use the Voice over GSM as the primary means of reporting, program a '10' in front of the phone number. Use the latest panel software. All programming is done via the panel.
	Protocol	Select *Installer Menu>Control Panel>Communication>Central Station>Phone Numbers>Phone Number n>Protocol.* **Note:** Use any of the panel protocols (SIA, ContactID).
	Backup	Select *Installer Menu>Control Panel>Communication>Phone Number >Phone Number n>Events>Communications>Test Reports.* **Note:** Use GSM reporting as backup.

Using the GSM/GPRS module

This section provides information on using the GSM/GPRS GPRS module.

Obtaining the GSM/GPRS module status

System status information is GSM/GPRS specific.

1. Enter programming mode.
2. Navigate with the keys to *NX-7002 Module>Options>Status Check* and press **OK**.
3. Scroll through the status messages to view the current status of the module. Table 26, *Status messages* explains each status message.

Table 26. Status messages

	Message	Description
GSM Connection	GSM Engine Comms	The modem is responding to AT commands.
	SIM PIN Accepted	The SIM is valid and programmed correctly.
	Logged into GSM Network	The SIM has been enrolled on the GSM network.
	SIM PUK Required	The SIM PIN code is blocked. Put the SIM into a mobile phone and enter the PUK code to unblock it.

	Message	Description
	Sending SMS	The module is sending a report to the SMS destination.
	Using GSM Audio	The module is sending an audio report from the control to the audio destination.
	Using GSM CSD	The module is sending data.
	GPRS Connected	The module is communicating with the GPRS network.
	Good RSSI	Good level of the received signal.
Power	Battery Fault	There is a problem with the main battery.
	SM PSU Fault	There is a problem with the 3.8 V power supply for the GPRS modem caused by a problem with the main battery.
	Bus Power Fault	There is a problem with the 13.8 V voltage supplied by the bus to the module.

Troubleshooting

Table 27. Troubleshooting problems and solutions

Problem	Caused by	Do this
The module is not sending messages.	The antenna is faulty or missing.	Ensure the antenna is attached. Replace the old or faulty antenna.
The *SIM PIN Accepted* message is off. The module provides GSM modem information but no GSM operation works.	The SIM card is not inserted or inserted incorrectly.	Insert the SIM card correctly.
The SIM card is blocked. The *SIM PIN Accepted* message is off and the *SIM PUK Required* message is displayed.	The SIM PIN code is not correctly programmed.	Insert the SIM card into a mobile phone and enter the PUK code.
The *Logged into GSM Network* message is off and the *Current Operator* menu entry is blank.	The GSM operator ID number is incorrect.	Enter 00000 to enable automatic operator selection.

Autotest

You can run a periodic autotest to ensure the system is working correctly. Autotest parameters are configured on the control panel. You can configure the control panel to run autotests and place autotest events in the event log without reporting them. You can then configure the GSM/GPRS module to report the autotest events. You must enable the autotest event in the *Control Panel* menu, using *Events>Communications>Test Reports* options.

Reporting protocols and formats

Reporting fixed codes in SIA and Contact ID

Table 28 lists the event codes sent for different reports (if enabled) when using SIA and Contact ID formats. The numbers in brackets following the event is the number that is reported as the zone number. If there are no parentheses, the zone is 0. An asterisk represents the first character from the event code of the zone that is bypassed or in trouble.

Table 28. Event codes

Report	Contact ID	SIA	Report	Contact ID	SIA
Manual test	601	RX	Keypad tamper	137	TA
Autotest	602	RP	Keypad panic (audible)	120	PA
Open (user number)	401	OP	Keypad panic (silent)	121	HA
Close (user number)	401	CL	Duress	121	HA
Cancel (user number)	406	OC	Keypad auxiliary 1	110	FA
Download complete	412	RS	Keypad auxiliary 2	100	MA
Start program	627	LB	RF sensor lost (zone number)	381	*T
End program	628	LX	RF sensor restore (zone number)	381	*R
Recent close (user number)	401	CR	Sensor low battery (zone number)	384	XT
Exit error (user number)	457	EE	Sensor battery restore (zone number)	384	XR
Event log full	605	JL	Zone trouble (zone number)	380	*T
Fail to communicate	354	RT	Zone trouble restore (zone number)	380	*R
Expander trouble (device number)	333	ET	Zone tamper (zone number)	137	TA
Expander restore (device number)	333	ER	Zone tamper restore (zone number)	137	TR
Telephone fault	351	LT	Zone bypass (zone number)	570	*B
Telephone restore	351	LR	Bypass restore (zone number)	570	*U
Siren tamper (device number)	321	YA	Early open/late close	451	OK
Siren restore (device number)	321	YH	Zone activity fault	391	NA
Aux power over current (device number)	312	YP	Zone activity restore	391	NS
Aux power restore (device number)	312	YQ	Fail to close	454	CI

Report	Contact ID	SIA	Report	Contact ID	SIA
Low battery (device number)	309	YT	RF jamming	344	XQ
Low battery restore (device number)	309	YR	RF jamming restore	344	XH
Mains fail (device number)	301	AT	Smoke detector clean me	393	YX
Mains restore (device number)	301	AR	Smoke detector clean me restore	393	YZ
Box tamper (device number)	137	TA	Box tamper restore (device number)	137	TR

Special Reports

Table 29. Special Reports

Report	Contact ID	SIA
Fail to communicate over PSTN	354 (0)	RT000
GSM module problem	354 (1)	RT001
Fail to communicate over SMS	354 (2)	RT002
Fail to communicate over GPRS	354 (2)	RT002
GSM Login Failure	351 (193)	LT193
GSM Login Success	351 (193)	LR193
Low RSSI	351 (194)	LT194
Good RSSI	351 (194)	LR194
GPRS Down	351 (195)	LT195
GPRS OK	351 (195)	LR195
RSSI Value combined with test call (vvv= RSSI value)		RXvvv

SMS SIA reporting message format

SIA reporting over SMS can be set to one of three modes: separate events, combined events and reporting with partition modifiers.

Separate events

Account codes are used to identify partitions. Events for separate account codes are sent in separate messages using the syntax:

- >aaaaaa eennn [eennn …].

See Table 30 for a detailed syntax description.

Table 30. Reporting syntax

Format key	Description
>	The message opening character.
aaaaaa	A six-digit account code.
ee	A two-digit SIA code.
nnn	A three-digit number, e.g. zone number.
Rin	Partition modifier, 'Ri' is literal, n is the partition number.
.	The message closing character.
/	Separator
[X]	X is optional
[X ...]	X is optional and may be repeated one or more times.

The settings and events in Table 31 are transmitted in the following messages.

- >123456 BA001 BA003.
- >987654 YT000.
- >345678 TA030.

Table 31. Example settings and events

Setting	Value
System account code for the given destination	987654
Partition 1 account code	123456
Partition 3 account code	345678
BA on zone 1	Partition 1
BA on zone 3	Partition 1
Low battery on panel	YT000
TA on zone 30	Partition 3

Combined events

Account codes are used to identify partitions. Events for separate accounts codes can be sent in the same message using the syntax:

- aaaaaa eennn [eennn …][/aaaaaa eennn [eennn …]…].

See Table 30 for a detailed syntax description.

The settings and events in Table 31 are transmitted in the following message.

- >123456 BA001 BA003/987654 YT000/345678 TA030.

Reporting with partition modifiers

Partition modifiers are used to identify partitions. Events with partition modifiers are sent using the syntax:

- >aaaaaa eennn[/Rin] [eennn[/Rin] …].

See Table 30 for a detailed syntax description.

The settings and events in Table 31 are transmitted in the following message.

- > 987654 BA001/Ri1 BA003/Ri1 YT000 TA030/Ri3.

SMS Contact ID reporting

Each SMS message contains only one event. The information in the message is the same as a Contact ID message sent over the PSTN with the digits coded using ASCII instead of DTMF.

The following syntax is used

- aaaa18qnnnggppp

Table 32. Contact ID reporting syntax

Format key	Description
aaaa	Account number for the event that follows. Hexadecimal digits A - F are in upper case
18	Shows that this is a Contact ID message.
q	Contact ID qualifier. '1' = activation, '3' = restore.
nnn	Three-digit Contact ID event number (decimal).
gg	Two-digit group number (decimal). This contains the partition that generated the event, or zero for a non-partition event
ppp	Three-digit point number (decimal). This contains the zone, user or module number for the event.
0	Contact ID checksum. This '0' can be ignored.

Example

The following example shows Partition 3 account code E9D3 has a keypad tamper (Contact ID 137) on zone 30 partition 3.

- E9D318113703030

Table 33. Contact ID example

Part of Message	Format key	Description
E9D3	aaaaa	Account number E9D3
18	18	Shows that this is a Contact ID message.

Part of Message	Format key	Description
1	q	Activation
137	nnn	Contact ID event number
03	gg	Partition 3
030	ppp	Zone 30

HomeText control

Users can use HomeText to send commands and information to and receive information from the security system.

Message format

Messages can consist of a registered telephone number assigned to the particular user, a password, commands and values. All these elements are not case-sensitive. No national characters are allowed and should not be used - neither in commands nor in values - for example, you should type **espanol** instead of **Español**.

- The telephone number part is necessary only if the system is configured to accept commands from unregistered phones, and the user calls from the telephone unknown to the system. If entering the phone number also a password is required. For more information, see the *Registered Phone Access* and the *Any Phone Access* menu option descriptions in the glossary.
- A system can be set up to always use a password. If so, enter a password before the command.
- Commands are instructions sent to the security system. They are shown in **bold** below.
- [*Values*] are information the user wants to send or receive from the system. They are shown italicised between brackets [ ] below.
- If you need to enter more than one value in a list, they need to be separated by spaces. For example, to bypass zones 2, 4 and 6, send the command **bypass** 2 4 6.

To Do This	Send This	Explanation	Example
Get your system status	**status**	Sends the system status to your phone.	**status**
Get your system status from an unregistered phone if you have Any Phone Access rights	[*registered_phone_number Password*] **status**	Sends the system status to your unregistered phone.	**32444123456 44aa44 status** where 32444123456 is your registered phone number (NOT the number you are calling from) and 44aa44 is your password. **Note:** You can also use this syntax (adding the registered phone number and the password to the beginning of the command) when sending any other command from an unregistered phone.

To Do This	Send This	Explanation	Example
Arm your system	**arm** [*partition list*]	Arms the system remotely. Instead of the partition numbers you can use a keyword ALL for all partitions.	**arm 1** to arm partition 1 **arm 1 3** to arm partitions 1 and 3 **arm all** to arm all partitions **32444123456 44aa44 arm 1 3** to arm partitions 1 and 3 from an unregistered phone, where 32444123456 is your registered phone number and 44aa44 is your password.
Disarm your system	**disarm** [*partition list*]	Disarms the system remotely.	**disarm 1** to disarm partition 1 **disarm 1 3** to disarm partitions 1 and 3 **disarm all** to disarm all partitions
Partarm your system	**partarm** [*partition list*]	Partarms the system remotely.	**partarm 1** to arm partition 1 **partarm 1 3** to arm partitions 1 and 3 **partarm all** to arm all partitions
Get the status of the specified zones	**zone status** [*partition list*]	Sends the status of the zone(s) to your phone (for example, informs whether the zone is bypassed or open.) Sending a command without a partition list returns information for all partitions.	**zone status 1** to receive the message with zone status from zones assigned to partition 1 **zone status all** to receive the message with zone status for all zones
Get a list of zones with problems	**zone faults** [*partition list*]	Sends a list of zones with problems (like tamper, low battery, zone lost, etc.) to your phone. Sending a command without a partition list returns information for all partitions.	**zone faults 1** to receive fault information from zones assigned to partition 1 **zone faults all** to receive the message with zone faults for all zones
Bypass zones	**bypass** [*zone list*]	Bypasses the specified zones.	**bypass 1 3** to bypass zones 1 and 3
Read events from the event log	**events** [*number*] **events** [*range*]	Sends the specified event or events from the event log to the phone.	**events 1** to read the last (newest) event from the panel log **events 1 3** to read the last 3 events from the panel log **events** returns the 10 most recent events
Set a connection to a home automation device	**output** [*output_number X10_house_code X10_unit*]	Connects a specified home automation device.	**output 2 A 1** to set output two to control X-10 device with house code A and unit number 1
Switch on X-10 outputs	**on** [*output list*]	Switches on an X-10 output.	**on 1 4 7** to switch on X-10 outputs 1, 4 and 7 **on all** to switch on all X-10 outputs
Switch off X-10 outputs	**off** [*output list*]	Switches off an X-10 output.	**off 1 4 7** to switch off X-10 outputs 1, 4 and 7 **off all** to switch off all X-10 outputs
Activate an auxiliary function	**switch aux** [*output list*]	Changes the auxiliary function that occurs when it is activated, for example by a button on a keyfob.	**switch aux 1** to activate aux output 1 on the panel
Change your user code	**user code** [*new user code*]	Changes your user code.	**user code 0101** to change your own user code to 0101
Change another user code	**user code** [*user number new user code*]	Changes another persons' user code.	**user code 2 0101** to change the user code to 0101 for the user 2
Delete a user code	**delete user code** [*user number*]	Deletes a user code.	**delete user code 2** to delete the user code for the user 2
Start reporting	**start reporting**	Sends reports from the NX7002.	**start reporting**

To Do This	Send This	Explanation	Example
Stop reporting until system re-arm	**stop reporting**	Stops reports being sent form the NX7002 until the system is rearmed.	**stop reporting**
Stop reporting until you start it again	**stop reporting permanent**	Stops reports being sent from the NX7002 until the start reporting command is sent.	**stop reporting permanent**
Register your phone	**register** [*phone number user number*]	The phone is registered with your alarm system.	**register 32444123456 2** to register the number 32444123456 to user 2
Register your phone with a new password	**register** [*phone number user number Password*]	The phone is registered with your alarm system with a new password.	**register 32444123456 1 44aa44** to register the number 32444123456 to user 1 with a password 44aa44
To change language	**language** [*language*]	The language the SMS texts use is changed. The available arguments (languages) are: English, Dutch, Espanol, Suomi, Italiano, Polska, Portugues, Svenska, Francais, Dansk, Deutsch and Norsk. **Note:** no national characters are to be used in typed arguments.	**language deutsch** to change the interface to German
To get a list of SMS commands	**help**	Sends a list of valid SMS commands to your phone.	**help**
To get a users details	**user details** [*user number*]	Sends the users details to your phone.	**user details 2** to receive a message with information about user 2
To get the current configuration of outputs	**list outputs**	Sends a list of how the outputs are currently programmed to your phone.	**list outputs**
To get a list of users	**list users**	Sends a list of all currently registered users and their phone numbers.	**list users**
To disable access from the specified phone	**disable phone** [*phone number*]	Disables the SMS system control from the particular phone.	**disable phone 32444123456** to disable HomeText control from this phone number
To enable access from the specified phone	**enable phone** [*phone number*]	Enables a previously disabled SMS system control from the particular phone.	**enable phone 32444123456** to enable HomeText control from this phone number
To change your password	**password** [*new password*]	Changes your password.	**password 44aa44** to change a password assigned to your phone to 44aa44
To change another persons SMS password	**password phone** [*phone number new password*]	Changes another person's password.	**password phone 32444123456 44aa44** to change a password assigned to the number 32444123456 to 44aa44

Receiving SMS messages from a security system

HomeText can be set up to send two types of text messages to a user's phone.

- **Confirmation messages** are sent after a message has been received. They let the user know the message has been received and the command has been carried out.

- **Report messages** are sent after events. These are similar to the reports in the event log viewed on the keypad.

Message	Meaning
Alarm **partition list**	There is an alarm in the partitions listed.
Armed **partition list**	The partitions listed have been armed.
Partarmed **partition list**	The partitions listed have been part armed.
Disarmed **partition list**	The partitions listed have been disarmed.
Not ready **partition list**	The partitions listed cannot be armed.
Partition **n** Open **zone list**	The zones listed in this partition are open.
Partition **n** Bypassed **zone list**	The zones listed in this partition are bypassed.

HomeText reporting

The following is an example of a HomeText report sent to a control centre.

GE[Security]

01/04 05:57 Close

[Arm] P1 User 1

01/04 05:57 Close

[Arm] P2 User 1

Table 34. HomeText example

Part of Message	Description
GE[Security]	Site address
01/04 05:57	Date and time
Close [Arm]	Action reported
P1	Partition number
User 1	User name

Glossary

Term	Definition
A	

Term	Definition
Account Code	A *Reporting* setting that configures the SIA or Contact ID account number for the selected report receiver. SIA account numbers are 6 digits long. Contact ID account numbers are 4 digits long. The letters A, B, C, D, E and F can be included in account codes.
Alarm Restores	A *Reporting* setting that sends a report to the selected report control when the alarm has been restored after an alarm.
Alarms	A *Reporting* setting that sends a report to the selected report control when an alarm occurs.
All abort	A *Control Panel* menu entry that cancels all pending reports if the system is disarmed during reporting.
Allow Calls From	An *Up/download* setting that answers calls from a known phone number only. To enable this setting, you must enable *Remote Initiated* and program the phone number of the PC in *Up/Download>Phone Number*.
Any Phone Access	A *Reporting* menu entry that lists all the users with rights to send HomeText commands from the phone unknown to the system. **Note:** Sending a HomeText message from the unknown phone requires adding the phone number registered for the user and the user password at the beginning of the command. They are used by the system to confirm the user's identity. For example, type **32444123456 44aa44 status** to send a status command, where 32444123456 is your telephone number registered in the system, and 44aa44 is your password.
Application	An *Options* menu entry that groups application related status messages.
Arm/Disarm/Alarm	A *Reporting* menu entry that groups the events that are reported to the selected report control.
Auto U/D at Test Time	An *Up/download* setting that configures the NX-7002 to automatically dial the PC to initiate an upload/download session after an autotest. You must program the autotest on the control panel.
Auto-answer	An *Up/download* setting that configures the NX-7002 to automatically answer any incoming calls. To enable this setting, you must enable *Remote Initiated*.
Aux Short Circuit and Restores	A *Reporting* setting that sends a report to the selected report control when too much current is detected. A restore report is also sent when the overcurrent condition is fixed.
B	
Backup Destination	A *Reporting* setting that configures the backup destination for the selected report control. If using another device as the backup destination, set the reporting format in *Reporting>Backup Format* and enable test report events in the backup device.
Backup Format	A *Reporting* setting that configures the reporting format when using another device as backup. You must set the same reporting format on the backup device.
Battery Fault	An *Options* setting that indicates that there is a problem with the battery.
Bit Error Rate	An *Options* setting that displays the current Bit Error Rate (BER). The BER value is periodically updated when the NX-7002 is logged into the network. This information is used for verification purposes only. BER values range from 0% to 7%, with 99 as unknown. It is applicable to GPRS only.
Bus Power Fault	An *Options* setting that indicates that there is a problem with power to the bus.
C	
Callback Required	An *Up/download* setting that configures the NX-7002 to call back the PC in order to initiate an upload/download session. To enable this setting, you must enable *Remote Initiated*.
CID	Contact ID reporting protocol
Communications	A *Reporting* menu entry that groups together the communication events that are reported to the selected report control.

Term	Definition
Connection Fault	An *Options* menu entry that groups connection fault options. A connection fault occurs when the module cannot log into the GSM network.
Connection Type	An *Up/Download* menu entry that selects a CSD or GPRS connection.
Contact ID	A *Reporting* menu entry that selects the Contact ID protocol.
Control Panel Timeout	A *Reporting* setting that configures the maximum time during which the control panel must report an event. If the NX-7002 report control is configured for secondary reporting and the control panel does not report the event during this time, the report control reports the event. This can be from 1 to 255 seconds. If set to 0, the setting is disabled.
CSD	Circuit Switched Data. This is a communication format used to upload/download data. It is similar to a modem but it is wireless and built in to the NX-7002. An *Options* menu entry that groups CSD connection options.
Current Operator	An *Options* setting that displays the name of the automatically or manually selected GSM network operator. This setting is valid only when the NX-7002 is logged into the GSM network.
D	
Destination	A *Reporting* setting that configures the report destination for the selected report control.
DHCP Assigned IP Address	An *Options* setting that displays the IP address that is assigned to the NX-7002 when it logs into the GPRS network.
DL900	A PC upload/download program for NetworX systems.
Download	The process of sending programming information or data on the panel to a PC running upload/download software or to the central station.
Download Starting	An *Options* setting that indicates that downloading is about to start.
Downloading	An *Options* setting option that indicates that downloading is taking place.
E	
Event	An alarm condition that has been detected by the control panel.
Event log	A list of events that occur in the system regardless of the armed state of the system. They are held in a sequential event buffer with a time and date stamp. When the log is full, it overwrites the oldest entries with new data. These events can later be viewed through downloading.
Events	A *Reporting* menu entry that contains all configurable events for each report control. All events for report control 1 are enabled by default. Events for all other report controls are disabled by default. Enabled events are formatted into one or more messages according to pre-configured settings and sent to the selected report destination. You must enable *Test Reports* if using the NX-7002 as backup to another auxiliary dialer.
Expander Trouble and Restores	A *Reporting* setting that sends an expander trouble and restore report to the selected report control.
F	
Fail to Communicate	A *Reporting* setting that reports a fail to communicate event to the selected report control.
FTC Report Attempts	A *Reporting* setting that configures the number of attempts that can be made to a specific report destination before the Fail to Communicate condition is set. This can be from 1 to 15.
G	

Term	Definition
Good RSSI	An *Options* setting that indicates that the current RSSI level is equal to or greater than the minimum signal quality level configured in *Line Fault RF Level*. If the RSSI level drops below this value a GSM line fault is indicated.
GPRS	General Packet Radio Service. A global standard for wireless communications. It supports a range of bandwidths and can transmit and receive both small bursts and large amounts of data. An *Options* menu entry that allows a GPRS connection for up/download.
GPRS APN	An *Options* setting that configures the GPRS access point name. Contact the network provider to obtain this name. This is a mandatory setting if using TCP/IP reporting.
GPRS APN 2	An *Options* setting that configures a second GPRS access point name. Contact the network provider to obtain this name. This is used if the connection cannot be made via the *GPRS APN*.
GPRS Connected	An *Options* setting that indicates that the module is logged into the GPRS network.
GPRS Disconnect Delay	This contains the length of time with no activity before the GPRS disconnects.
GSM	Global System for Mobile Communications. A global standard for wireless communications. It supports narrowband Time Division Multiple Access (TDMA). An *Options* menu entry that groups GSM connection options.
GSM Connection	An *Options* menu entry that groups GSM connection settings.
GSM Engine Comms	An *Options* setting that indicates that communication with the GSM module is established.
GSM Engine Info	An *Options* menu entry that groups information returned from the on-board GSM module on the GSM module.
GSM Operator	An *Options* menu entry that groups information on the current GSM operator and allows a specific GSM operator to be manually selected.
H	
Hit 24H Report Limit	An *Options* setting that indicates that the maximum number of reports allowed in 24 hours has been reached. This applies to SMS and GPRS reports.
HomeText	An *Options* menu entry that groups together HomeText information,
HomeText Control	An *Options* setting that enables or disables HomeText.
I	
IP Address	A *Reporting* setting that configures the address of the selected TCP/IP receiver. An *Up/download* setting that configures the address of the selected TCP/IP receiver.
K	
Keypad for Zone Text	An *Options* setting that selects the keypad from which zone and user names are obtained.
L	
Language	A *Reporting* setting that sets the language used for SMS messages.
Line Fault Delay	An *Options* setting that configures the length of time the RSSI signal must be below the Line Fault RF Level before a line fault is generated. This can be from 0 to 255 seconds.
Line Fault Indication	A *Reporting* setting that enables the display of GSM/GPRS line faults.
Line Fault Reporting	A *Reporting* setting that enables the reporting of GSM/GPRS line faults.

Term	Definition
Line Fault RF Level	An *Options* setting that configures the acceptable level of the RSSI signal. If the signal falls below this level for the amount of time set in *Line Fault Delay*, a line fault is generated. This can be from 1 to 31. If set to 0, the setting is disabled.
Line Number	A *Reporting* setting that configures the line number associated with the selected receiver account.
Logged into GSM Network	An *Options* setting that indicates that the GSM module is logged into the GSM network.
M	
Manufacturer	An *Options* setting that contains the GSM Engine Manufacturer Identification.
Max Joined SMSs	A *Reporting* option that sets the maximum number of text messages that can be joined together and sent as a single SMS.
Max Report Attempts	A *Reporting* setting that configures the number of attempts the NX-7002 makes to send a report. This can be from 0 to 15.
Max Reports in 24h	A *Reporting* setting that configures the maximum number of reports that can be sent by the NX-7002 in 24 hours. The NX-7002 stops reporting when the number of messages in a 24 hours exceeds this number. This can be from 1 to 255. If set to 0, there is no limitation. This applies to SMS and TCP/IP.
Max U/D Authentication Attempts	An *Up/Download* setting that contains the maximum number of attempts that are made each time the Up/Download report is made. After this number of attempts, the system is disabled for the length of time set in U/D Authentication Disable Time.
Mode	An *Options* setting that configures the mode used for site initiated CSD GSM calls. If you are experiencing problems with upload/download, change this setting from transparent mode to non-transparent mode or vice versa. See also Transparent mode and Non-transparent mode
Model	A menu option that displays the current model of the GPRS module.
Module address	A NetworX bus module number is assigned to each system module. The system uses this number to identify the module. It is also used to report module problems (such as tampers and module supervision lost) to the central station. The NX-7002 module address is 78.
N	
Network	An *Options* menu entry that groups network options.
Non transparent mode	An operating mode for CSD on a GSM network. An intermediate modem is used on the network to transfer data from one modem to another.
O	
Only Registered Phones	An *Options* menu setting that allows commands to be accepted only from registered HomeText phone numbers.
Opening/Closing	A *Reporting* setting that sends a report to the selected report control stating when the system is opened (disarmed) and closed (armed).
Operator Selection	An *Options* setting that configures the GSM network operator used by the NX-7002. Set this to 00000 to allow the SIM card automatically select a network operator. Alternatively, enter an operator ID code to manually select a network operator. The *Logged into GSM Network* message does not appear if an invalid selection is made or the network is unreachable.
Options	A menu entry that groups the NX-7002 options.
P	

Term	Definition
Partition Account Codes	A *Reporting* menu entry that lists the account codes for each partition. The account code is sent when the relevant partition is reported. There are two sets of account codes. The first set assigns an account code to each report destination. The second set assigns an account code to each partition. If you attempt to use both sets, the partition account code takes precedence. See also Account Code
Password	An *Options* setting that configures the password for a PAP login. Contact the network provider to confirm if a PAP login is required and to obtain the user ID and password.
Password Always Required	An *Options* menu setting that requires a password to be included when a HomeText message is sent to the system. Passwords must be between 6 and 16 characters and contain at least one number between 0-9. They should only have alphanumeric characters and no spaces.
Phone Number	A *Reporting* setting that sets the phone number to which SMS reports are sent. An *Up/download* setting that sets the phone number of the PC running the upload/download software.
Polling Time	A *Reporting* setting that configures the length of theTCP/IP polling time. This value must match the TCP/IP polling time set on a TCP/IP receiver. The value chosen is determined by the level of security required and the cost of data transmission. This can be from 1 to 255 minutes on the NX-7002 and 1 to 255 seconds on the NX-590. If set to 0, the option is disabled.
Polling Units	A *Reporting* setting that sets polling time in either hours or minutes.
Port Numbers	An *Options* menu entry that groups TCP/IP port options.
Power	A *Options* menu entry that groups power related status messages.
Power	*A Reporting* menu entry that groups the power events that are reported to the selected report control.
Power Trouble and Restores	A *Reporting* setting that reports mains failure, mains restore, low battery and low battery restore events to the selected report control.
Primary reporting	The main means of reporting selected events. See also Secondary reporting
Program/Download	A *Reporting* setting that reports programming and up/download events to the selected report control.
Protocol	A *Reporting* setting that configures the communicator format used to report to the selected SMS receiver. Consult the instructions for your central station receiver to determine which format is compatible.
PUK code	Personal Unblocking Key. The code to use to unblock the SIM card. The SIM card can block when an incorrect SIM PIN is entered repeatedly.
R	
Receiver Number	A *Reporting* setting that configures the phone line receiver number associated with the receiver account.
Receiver Polling	A *Reporting* setting that configures the NX-7002 to send polling messages to the report receivers.
Receivers	A *Reporting* menu entry that groups TCP/IP receiver options.
Registered Phone Access	A *Reporting* menu entry that lists all the users with rights to send HomeText commands from the phone registered in the system. **Note:** Only users listed here are granted rights to send HomeText commands to the system. Removing a user from this list suspends all user's rights to send HomeText commands, including Any Phone Access privileges.
Relay Unrecognised SMS to Admin	An *Options* menu option, that if enabled, sends any unrecognised text messages to the administrator.

Term	Definition
Remote Initiated	An *Up/download* setting that allows an upload/download session between the NX-7002 and the PC to be initiated by the PC. The PC dials into the NX-7002. You must dial the data phone number to dial into the GSM for upload/download. This setting is dependent on other settings (*Allow Calls From*, *Auto-answer* and *Callback Required*).
Report Attempts	A *Reporting* menu entry that groups report options.
Report Control	A block of reporting data that contains configurations to format selected events into one or more messages according to pre-configured settings and send them to specified destinations. A *Reporting* menu entry that groups report control options.
Report Delay	A *Reporting* setting that configures the delay in seconds before the NX-7002 module reports. If any other events occur during this delay, they are sent with the first event in one message. This can be from 0 to 255 seconds. This setting is valid only if using SMS reporting.
Report Format	A *Reporting* setting that configures the communicator format used to report to the selected TCP/IP receiver. Consult the instructions for your central station receiver to determine which format is compatible.
Report Groups	A *Reporting* option that sets which reports are sent to the phone number.
Report Timeout	A *Reporting* setting that configures the maximum length of time for each attempt by the NX-7002 to report to each receiver. If the report is not successful during this time, the attempt is abandoned. This can be from 0 to 255 seconds.
Report When	A *Reporting* setting that enables primary reporting (*Report Always*) or secondary reporting (*Panel Dialer Problem*) for the selected report control. See also Primary Reporting and Secondary Reporting
Report XSIA	A *Reporting* setting that enables XSIA reporting. When this option is enabled, reports are sent in XSIA format instead of SIA format. In short, it means that User/Zone names will be added to the reports. It does not affect reports in any other format,.
Reporting	A menu entry that groups reporting options for the GPRS module. An *Options* menu option that displays a status message when reporting is taking place.
Reset Settings	A menu option that defaults the GPRS module. This is a necessary procedure on all components before starting to program the system.
RF Low Battery and Restores	A *Reporting* setting that sends a report to the selected report control when a low battery condition occurs in an RF sensor. A restore report is also sent when the low battery condition is no longer active.
RF Sensor Lost and Restores	A *Reporting* setting that sends a report to the selected report control when an RF sensor is missing. A restore report is sent to the central station when the receiver receives a valid signal from the lost transmitter.
RSSI	Received Signal Strength Indicator. This indicates the field signal strength of the NX-7002.
RSSI in test call	A *Reporting* menu entry that adds the RSSI strength into the test report.
RSSI Value	Received Signal Strength Indication Value. This is a measure of the RF reception and is similar to the indication on a mobile phone. An *Options* setting that displays the current RSSI value. The RSSI value is periodically updated when logged into the network. RSSI values range from 0 to 31 with 99 as unknown.
S	
Secondary reporting	The means of reporting events that the control panel fails to report.
Sending SMS	An *Options* menu option that indicates that the module is sending an SMS message over the GSM network.
Serial Number	An *Options* setting that displays the serial number of the GSM modem used by the NX-7002. It is used for diagnostics only.

Term	Definition
SIA	Securities Industry Association (reporting protocol).
SIA Comb'd Evts	A menu entry that sets SMS reporting options so that events for separate account codes can be sent in the same message.
SIA partition mods	A menu entry that allows partition modifiers to identify partitions.
SIA Single Evts	A menu entry that sets SMS reporting options so that events are grouped and sent as separate messages to separate account codes.
SIM card PUK code	See PUK code
SIM PIN Accepted	An *Options* setting that indicates that the PIN number for the SIM card has been entered correctly.
SIM PIN Code	An *Options* setting that configures the code used to enrol the SIM card on the GSM network.
SIM PUK Required	An *Options* setting that indicates that the SIM card has been blocked and a PUK code must be entered to unblock it. Put the card into a mobile phone and enter the PUK code. When the card has been unblocked put it back into the GPRS module.
Siren/Line Cut and Restores	A *Reporting* setting that sends a report to the selected report control when a siren or phone fault occurs. A restore report is sent when the fault is fixed.
Site Address	A *Reporting* menu option that contains the site address.
Site Initiated	An *Up/download* setting that allows an upload/download session between the NX-7002 and the PC to be initiated from a keypad.
SM PSU Trouble	An *Options* setting that indicates that there is a problem with its 3.8 V Switched Mode Power Supply Unit.
SMS	Short Message Service (SMS) is a service for sending short text messages to mobile phones.
SMS Reporting	A *Reporting* menu entry that groups SMS reporting options.
SMS Service Centre Address (SMCS)	An *Options* setting that configures the SMS service centre phone number. Usually, this number should be left blank as it is dialled automatically by the SIM card. It should include the country code.
Software Revision	An *Options* setting that displays the current software version of the GSM engine.
Speed	An *Options* setting that configures the baud rate for CSD/GSM download. This setting must match the baud rate set on the PC modem.
Status Check	An *Options* menu entry that groups status messages for GSM events. See chapter 5 for more information on status messages.
Switch to EN	A menu option that switches the NX-7002 module to the EN 50131-compatible settings. For additional information about the EN 50131 norm, see Appendix 7.
System Control	An *Options* menu entry that groups together HomeText system settings.
T	
Tamper/Fault	A *Reporting* menu entry that groups together the tamper and trouble events that are reported to the selected report control.
Tampers and Restores	A *Reporting* setting that sends a report to the selected report control when a tamper occurs. A report is also sent when the tamper is no longer active.
TCP/IP Alarm Port	An *Options* setting that configures the number of the TCP/IP port to which polling and alarms are reported. The default is 9999 and under normal circumstances should not be changed.
TCP/IP Reporting	A *Reporting* menu entry that groups TCP/IP reporting options.

Term	Definition
Test Reports	A *Reporting* setting that sends a test report to the selected report control at pre-programmed intervals. The units can be set in days or hours.
Traceability	A menu entry that groups additional information, like serial number, manufacture date, and firmware revision.
Transparent mode	An operating mode for CSD on a GSM network. Data is transferred directly from one modem to another modem.
Type	An *Options* setting that displays the type of GSM modem used by the NX-7002.
U	
U/D Authentication Disable Time	An *Up/Download* setting that contains the length of time for which the system is disabled after the maximum number of authentication attempts has been exceeded.
U/D Call Back after Voice Call	An *Up/Download* setting that starts an up/download session after a voice call.
U/D Port	An *Options* setting that indicates that configures the port for GPRS up/download.
Up/Download	A menu entry that groups options used to control download sessions between the up/download software and the control panel.
Upload	The process of retrieving information from a PC running the upload/download software.
Use V1.110	An *Options* setting that enables V.110 for site-initiated CSD GSM calls. Enable this setting if the PC is on an ISDN line and is using an ISDN modem.
User ID	An *Options* setting that configures the user ID for a PAP login. Contact the network provider to confirm if a PAP login is required and to obtain the user ID and password.
Using GSM Audio	An *Options* setting that indicates that the module is using GSM audio. The GSM audio channel is used when the panel reports through the voice channel of the GSM network.
Using GSM CSD	An *Options* setting that indicates that the module is using GSM CSD. See also *CSD*
V	
Version	A menu option that displays the current software version of the GPRS module.
X	
XSIA	Extended Securities Industry Association (reporting protocol). This adds a zone or user name when appropriate to the report.
Z	
Zone Bypass and Restores	A *Reporting* setting that sends a report to the selected report control when a zone is bypassed. A report is also sent when the zone is restored (un-bypassed).
Zone Inactivity Monitor	A *Reporting* setting that sends a report to the selected report control when a zone inactivity event occurs.
Zone Trouble and Restores	A *Reporting* setting that sends a report to the selected report control when a zone trouble condition occurs. A report is also sent when the trouble condition is no longer active.

GSM/GPRS module location-based programming worksheets

In the table below, you can find all the data required for location-based programming. In order to program the GSM/GPRS module, you should follow the procedure below:

1. Press **OK** to enter programming mode.
2. Next, type your installer code. At the *OK=LOC* prompt press **OK**. The *"Enter the device address"* prompt displays. You are now in the program mode and ready to select the module to program.
3. Press **78#** to select the GSM/GPRS module.
4. Program the values from the table below.
5. When all the desired changes in programming have been made, quit programming mode for the GPRS module by pressing twice the **NO** key. The NetworX V3 will exit programming and return to the *"Enter the device address"* level. Pressing twice the **NO** key again will exit the program mode.

Note: Each time you exit programming mode, the modem restarts and reads the PIN number, network operator and SMSC address number from the NX-7002 configuration.

Table 35. NX-7002 programming worksheets

(Factory defaults are in ***bold italic*** text)

LOC	DESCRIPTION		DEFAULT	PROGRAMMING DATA
0	MODE OF OPERATION FEATURE SELECTION			
	Segment 1 (Circle Numbers To Program)		**Segment 2** (Circle Numbers To Program)	
	1	***Enable site initiated downloading***	1	Use SIA DCS as backup format (Contact ID if off)
	2	***Enable remote initiated downloading***	2	Reserved
	3	Remote initiated download must be from known source	3	Reserved
	4	Enable remote download at test time	4	Reserved
	5	Enable auto-answer incoming CSD GSM download call	5	Reserved
	6	Callback required for incoming CSD GSM download call	6	Reserved
	7	Use V.110 for site-initiated CSD GSM calls	7	Reserved
	8	***Use non-transparent mode for site initiated CSD GSM calls***	8	Reserved
	Segment 3 (Circle Numbers To Program)		**Segment 4** (Circle Numbers To Program)	
	1	Reserved	1	Reserved
	2	Polling enable (for UL AA)	2	Reserved
	3	Reserved	3	Reserved
	4	Reserved	***4***	***TCP/IP Reporting in SIA (Contact ID if off)***
	5	Reserved	5	Reserved
	6	Reserved	6	Reserved
	7	Reserved	***7***	***Use 3-DES encryption***
	8	Reserved	***8***	***Up/downloading using GSM CSD (GSM GPRS if off)***
1	DESTINATION SELECTION FOR REPORT CONTROL 1		***0***	
2	BACKUP DESTINATION SELECTION FOR REPORT CONTROL 1		***0***	

LOC	DESCRIPTION		DEFAULT	PROGRAMMING DATA
3	REPORT DELAY FOR REPORT CONTROL 1		*0*	
4	EVENT SELECTION FOR REPORT CONTROL 1 (BY PARTITION)			
	Segment 1	Alarms and Restores	*1-2-3-4-5-6-7-8*	
	Segment 2	Open/Close	*1-2-3-4-5-6-7-8*	
	Segment 3	Bypass	*1-2-3-4-5-6-7-8*	
	Segment 4	Zone Trouble	*1-2-3-4-5-6-7-8*	
	Segment 5	Power Trouble (AC Failure / Low Batt.)	*1-2-3-4-5-6-7-8*	
	Segment 6	Siren & Telephone Fault	*1-2-3-4-5-6-7-8*	
	Segment 7	Test Reports	*1-2-3-4-5-6-7-8*	
	Segment 8	Program, Download, & Log Full	*1-2-3-4-5-6-7-8*	
	Segment 9	Tampers (zones and box)	*1-2-3-4-5-6-7-8*	
	Segment 10	Short Circuit	*1-2-3-4-5-6-7-8*	
	Segment 11	Sensor Lost	*1-2-3-4-5-6-7-8*	
	Segment 12	Sensor Low Battery	*1-2-3-4-5-6-7-8*	
	Segment 13	Expander Trouble (incl. keypad)	*1-2-3-4-5-6-7-8*	
	Segment 14	Failure To Communicate	*1-2-3-4-5-6-7-8*	
	Segment 15	Zone Activity Monitoring	*1-2-3-4-5-6-7-8*	
	Segment 16	Reserved	*1-2-3-4-5-6-7-8*	
5	DESTINATION SELECTION FOR REPORT CONTROL 2		*0*	
6	BACKUP DESTINATION SELECTION FOR REPORT CONTROL 2		*0*	
7	REPORT DELAY FOR REPORT CONTROL 2		*0*	
8	EVENT SELECTION FOR REPORT CONTROL 2 (BY PARTITION)			
	Segment 1	Alarms and Restores	*0-0-0-0-0-0-0-0*	
	Segment 2	Open/Close	*0-0-0-0-0-0-0-0*	
	Segment 3	Bypass	*0-0-0-0-0-0-0-0*	
	Segment 4	Zone Trouble	*0-0-0-0-0-0-0-0*	
	Segment 5	Power Trouble (AC Failure / Low Batt.)	*0-0-0-0-0-0-0-0*	
	Segment 6	Siren & Telephone Fault	*0-0-0-0-0-0-0-0*	
	Segment 7	Test Reports	*0-0-0-0-0-0-0-0*	
	Segment 8	Program, Download, & Log Full	*0-0-0-0-0-0-0-0*	
	Segment 9	Tampers (zones and box)	*0-0-0-0-0-0-0-0*	
	Segment 10	Short Circuit	*0-0-0-0-0-0-0-0*	
	Segment 11	Sensor Lost	*0-0-0-0-0-0-0-0*	
	Segment 12	Sensor Low Battery	*0-0-0-0-0-0-0-0*	
	Segment 13	Expander Trouble (incl. keypad)	*0-0-0-0-0-0-0-0*	
	Segment 14	Failure To Communicate	*0-0-0-0-0-0-0-0*	
	Segment 15	Zone Activity Monitoring	*0-0-0-0-0-0-0-0*	
	Segment 16	Reserved	*0-0-0-0-0-0-0-0*	
9	DESTINATION SELECTION FOR REPORT CONTROL 3		*0*	
10	BACKUP DESTINATION SELECTION FOR REPORT CONTROL 3		*0*	
11	REPORT DELAY FOR REPORT CONTROL 3		*0*	
12	EVENT SELECTION FOR REPORT CONTROL 3 (BY PARTITION)			
	Segment 1	Alarms and Restores	*0-0-0-0-0-0-0-0*	
	Segment 2	Open/Close	*0-0-0-0-0-0-0-0*	
	Segment 3	Bypass	*0-0-0-0-0-0-0-0*	
	Segment 4	Zone Trouble	*0-0-0-0-0-0-0-0*	

LOC	DESCRIPTION		DEFAULT	PROGRAMMING DATA
	Segment 5	Power Trouble (AC Failure / Low Batt.)	0-0-0-0-0-0-0-0	
	Segment 6	Siren & Telephone Fault	0-0-0-0-0-0-0-0	
	Segment 7	Test Reports	0-0-0-0-0-0-0-0	
	Segment 8	Program, Download, & Log Full	0-0-0-0-0-0-0-0	
	Segment 9	Tampers (zones and box)	0-0-0-0-0-0-0-0	
	Segment 10	Short Circuit	0-0-0-0-0-0-0-0	
	Segment 11	Sensor Lost	0-0-0-0-0-0-0-0	
	Segment 12	Sensor Low Battery	0-0-0-0-0-0-0-0	
	Segment 13	Expander Trouble (incl. keypad)	0-0-0-0-0-0-0-0	
	Segment 14	Failure To Communicate	0-0-0-0-0-0-0-0	
	Segment 15	Zone Activity Monitoring	0-0-0-0-0-0-0-0	
	Segment 16	Reserved	0-0-0-0-0-0-0-0	
13	DESTINATION SELECTION FOR REPORT CONTROL 4		0	
14	BACKUP DESTINATION SELECTION FOR REPORT CONTROL 4		0	
15	REPORT DELAY FOR REPORT CONTROL 4		0	
16	EVENT SELECTION FOR REPORT CONTROL 4 (BY PARTITION)			
	Segment 1	Alarms and Restores	0-0-0-0-0-0-0-0	
	Segment 2	Open/Close	0-0-0-0-0-0-0-0	
	Segment 3	Bypass	0-0-0-0-0-0-0-0	
	Segment 4	Zone Trouble	0-0-0-0-0-0-0-0	
	Segment 5	Power Trouble (AC Failure / Low Batt.)	0-0-0-0-0-0-0-0	
	Segment 6	Siren & Telephone Fault	0-0-0-0-0-0-0-0	
	Segment 7	Test Reports	0-0-0-0-0-0-0-0	
	Segment 8	Program, Download, & Log Full	0-0-0-0-0-0-0-0	
	Segment 9	Tampers (zones and box)	0-0-0-0-0-0-0-0	
	Segment 10	Short Circuit	0-0-0-0-0-0-0-0	
	Segment 11	Sensor Lost	0-0-0-0-0-0-0-0	
	Segment 12	Sensor Low Battery	0-0-0-0-0-0-0-0	
	Segment 13	Expander Trouble (incl. keypad)	0-0-0-0-0-0-0-0	
	Segment 14	Failure To Communicate	0-0-0-0-0-0-0-0	
	Segment 15	Zone Activity Monitoring	0-0-0-0-0-0-0-0	
	Segment 16	Reserved	0-0-0-0-0-0-0-0	
17	DESTINATION SELECTION FOR REPORT CONTROL 5		0	
18	BACKUP DESTINATION SELECTION FOR REPORT CONTROL 5		0	
19	REPORT DELAY FOR REPORT CONTROL 5		0	
20	EVENT SELECTION FOR REPORT CONTROL 5 (BY PARTITION)			
	Segment 1	Alarms and Restores	0-0-0-0-0-0-0-0	
	Segment 2	Open/Close	0-0-0-0-0-0-0-0	
	Segment 3	Bypass	0-0-0-0-0-0-0-0	
	Segment 4	Zone Trouble	0-0-0-0-0-0-0-0	
	Segment 5	Power Trouble (AC Failure / Low Batt.)	0-0-0-0-0-0-0-0	
	Segment 6	Siren & Telephone Fault	0-0-0-0-0-0-0-0	
	Segment 7	Test Reports	0-0-0-0-0-0-0-0	
	Segment 8	Program, Download, & Log Full	0-0-0-0-0-0-0-0	
	Segment 9	Tampers (zones and box)	0-0-0-0-0-0-0-0	
	Segment 10	Short Circuit	0-0-0-0-0-0-0-0	

LOC	DESCRIPTION		DEFAULT	PROGRAMMING DATA
	Segment 11	Sensor Lost	***0-0-0-0-0-0-0-0***	
	Segment 12	Sensor Low Battery	***0-0-0-0-0-0-0-0***	
	Segment 13	Expander Trouble (incl. keypad)	***0-0-0-0-0-0-0-0***	
	Segment 14	Failure To Communicate	***0-0-0-0-0-0-0-0***	
	Segment 15	Zone Activity Monitoring	***0-0-0-0-0-0-0-0***	
	Segment 16	Reserved	***0-0-0-0-0-0-0-0***	
21	DESTINATION SELECTION FOR REPORT CONTROL 6		***0***	
22	BACKUP DESTINATION SELECTION FOR REPORT CONTROL 6		***0***	
23	REPORT DELAY FOR REPORT CONTROL 6		***0***	
24	EVENT SELECTION FOR REPORT CONTROL 6 (BY PARTITION)			
	Segment 1	Alarms and Restores	***0-0-0-0-0-0-0-0***	
	Segment 2	Open/Close	***0-0-0-0-0-0-0-0***	
	Segment 3	Bypass	***0-0-0-0-0-0-0-0***	
	Segment 4	Zone Trouble	***0-0-0-0-0-0-0-0***	
	Segment 5	Power Trouble (AC Failure / Low Batt.)	***0-0-0-0-0-0-0-0***	
	Segment 6	Siren & Telephone Fault	***0-0-0-0-0-0-0-0***	
	Segment 7	Test Reports	***0-0-0-0-0-0-0-0***	
	Segment 8	Program, Download, & Log Full	***0-0-0-0-0-0-0-0***	
	Segment 9	Tampers (zones and box)	***0-0-0-0-0-0-0-0***	
	Segment 10	Short Circuit	***0-0-0-0-0-0-0-0***	
	Segment 11	Sensor Lost	***0-0-0-0-0-0-0-0***	
	Segment 12	Sensor Low Battery	***0-0-0-0-0-0-0-0***	
	Segment 13	Expander Trouble (incl. keypad)	***0-0-0-0-0-0-0-0***	
	Segment 14	Failure To Communicate	***0-0-0-0-0-0-0-0***	
	Segment 15	Zone Activity Monitoring	***0-0-0-0-0-0-0-0***	
	Segment 16	Reserved	***0-0-0-0-0-0-0-0***	
25	PRIMARY REPORTING FLAGS FOR REPORT CONTROL 1 TO 6			
	Segment 1 (Circle Numbers To Program)			
	1	***On*** = Report Control 1 is Primary Reporting Flag / Off = Report Control 1 is Backup for control panel		
	2	***On*** = Report Control 2 is Primary Reporting Flag / Off = Report Control 2 is Backup for control panel		
	3	***On*** = Report Control 3 is Primary Reporting Flag / Off = Report Control 3 is Backup for control panel		
	4	***On*** = Report Control 4 is Primary Reporting Flag / Off = Report Control 4 is Backup for control panel		
	5	***On*** = Report Control 5 is Primary Reporting Flag / Off = Report Control 5 is Backup for control panel		
	6	***On*** = Report Control 6 is Primary Reporting Flag / Off = Report Control 6 is Backup for control panel		
	7	Reserved		
	8	Reserved		
26 - 31	RESERVED			
32	PPP (dial-up account) user ID (chars 1 - 16)			
33	PPP (dial-up account) user ID (chars 17 - 32)			
34	PPP (dial-up account) password			
35 – 59	RESERVED			
60	Name of GPRS access point - APN (chars 1 - 16)			
61	Name of GPRS access point - APN (chars 17 - 32)			
62	Name of GPRS access point - APN (chars 33 - 48)			
63	Name of GPRS access point - APN (chars 49 - 64)			
64 - 100	RESERVED			

LOC	DESCRIPTION		DEFAULT	PROGRAMMING DATA	
101	NX-7002 assigned IP address (DHCP)		***0.0.0.0***		
102	IP address for TCP/IP receiver 1		***0.0.0.0***		
103	IP address for TCP/IP receiver 2		***0.0.0.0***		
104-108	RESERVED				
109	IP address for download computer		***0.0.0.0***		
110-118	RESERVED				
119	Receiver alarm and poll port		***9.9.9.9***		
120	Receiver download port		***9.9.9.8***		
121-138	RESERVED				
139	TCP/IP 1 Account number		***0-0-0-0-0-0-0-0***		
140	TCP/IP 1 Receiver number		***0-0-0-0***		
141	TCP/IP 1 Line number		***0-0-0-0***		
142	TCP/IP 2 Account number		***0-0-0-0-1-0-0-0***		
143	TCP/IP 2 Receiver number		***0-0-0-0***		
144	TCP/IP 2 Line number		***0-0-0-0***		
145	SMS 1 Account number		***0-0-0-0-0-0-0-0***		
146	SMS 2 Account number		***0-0-0-0-0-0-0-0***		
147-153	RESERVED				
154	Account number partition 1		***0-0-0-0-0-0-0-0***		
155	Account number partition 2		***0-0-0-0-0-0-0-0***		
156	Account number partition 3		***0-0-0-0-0-0-0-0***		
157	Account number partition 4		***0-0-0-0-0-0-0-0***		
162	TIMERS AND COUNTERS				
	Segment 1	Max Number of network attempts		***8***	
	Segment 2	Report attempts for Fail To Communicate		***4***	
	Segment 3	Maximum reports in 24 hours (TCP/IP, SMS)		***20***	
	Segment 4	Time in seconds for overall network attempt		***60***	
	Segment 5	Reserved			
	Segment 6	TCP/IP Polling time in minutes for PPP connections		***20***	
	Segment 7	Maximum time for PPP dialup in minutes		***0***	
	Segment 8	Maximum number of PPP dialup attempts		***2***	
	Segment 9	Reserved			
	Segment 10	Baud rate for CSD/GSM download		***6***	
	Segment 11	GSM line fault RSSI threshold		***5***	
	Segment 12	GSM line fault time in seconds		***60***	
	Segment 13	Control reporting timeout in seconds for secondary reporting		***180***	
	Segment 14	GPRS disconnect delay in seconds		***255***	
	Segment 15	Maximum Download authentication attempts		***10***	
	Segment 16	Download authentication disable time		***30***	
163	SMS 1 Phone number		***14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14***		
164	SMS 1 Format		***0***		
165	SMS 2 Phone number		***14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14***		
166	SMS 2 Format		***0***		
167	SMS service centre address (phone number)		***14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14***		

LOC	DESCRIPTION	DEFAULT	PROGRAMMING DATA
168	U/D call-back phone number (for CSD GSM)	***14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14***	
169	GSM SIM PIN code	***10-10-10-10-10-10-10-10***	
170	GSM operator selection	***0-0-0-0-0-0***	
171	Current GSM operator (read only)	***(name of operator)***	
172	Current GSM RSSI (read only)	***99***	
173	Current GPRS Bit Error Rate % (read only)	***99***	
174	DEVICE STATUS FLAGS (read only)		
	Segment 1		
	1	***On = Communication with GSM modem OK***	
	2	***On = SIM card PIN is OK***	
	3	***On = Logged in to the GSM network***	
	4	On = Sending SMS	
	5	On = Using GSM audio connection	
	6	On = Using GSM CSD connection	
	7	On = Connected to GPRS network	
	8	On = SIM card PUK code required	
	Segment 2		
	1	On = Battery voltage failure	
	2	On = GSM PSU voltage failure	
	3	On = Bus voltage failure	
	4	On = Communication channel failure	
	5	On = U/D session in progress	
	6	On = U/D session starting	
	7	On = Reporting in progress	
	8	***On = Good RSSI Level***	
	Segment 3		
	1	On = Max reports in 24h limit reached	
	2-8	Reserved	
175	GSM modem manufacturer (read only)	***(name of manufacturer)***	
176	GSM modem model (read only)	***(name of model)***	
177	GSM modem software revision (read only)	***(software revision)***	
178	GSM modem serial number (read only)	***(serial number)***	
179-199	Reserved		
200	MISCELLANEOUS FEATURE SELECTION		
	Segment 1		
	Reserved		
	Segment 2		
	1	***On = Enable HomeText Control***	
	2	On = only commands from registered phone numbers are accepted Off = commands from any phone number are accepted	
	3	On = A password must be included with the HomeText message Off = A password only required for HomeText messages from unregistered phone(s)	
	4	On = Forward unrecognized received SMS messages to the Administrator Phone	
	5	On = Initiate an up/download session via call-back when audio call is detected	
	6	On = Enable XSIA reporting for SIA overall media types	
	7	On = TCP/IP polling time in hours Off = TCP/IP polling time in minutes	
	8	Reserved	
	Segment 3		
	1	***On = Disable GSM/GPRS Line Fault indication on keypad***	

LOC	DESCRIPTION		DEFAULT	PROGRAMMING DATA
	2	***On = Disable GSM/GPRS Line Fault reporting***		
	3	On = Send RSSI combined with test call		
	4-8	Reserved		
	Segment 4 - 8			
	Reserved			
201	Reserved			
202	**Segment 1**	Number of bad attempts for per phone disable of HomeText control	***5***	
	Segment 2	LCD keypad address for zone text	***192***	
	Segment 3	Reserved		
203	Time for RSSI Line Fault Restore		***3***	
204-215	Reserved			
216	Current software version (read only)		***x.xx***	
217-224	Reserved			
225	HomeText Site characters 1-16		***0-0-0-0-0-0-0-0***	
226	HomeText Site characters 17-32		***0-0-0-0-0-0-0-0***	
227	HomeText User Numbers			
	Segment 1	User Number for Phone Number 1	***0***	
	Segment 2	User Number for Phone Number 2	***0***	
	Segment 3	User Number for Phone Number 3	***0***	
	Segment 4	User Number for Phone Number 4	***0***	
	Segment 5	User Number for Phone Number 5	***0***	
	Segment 6	User Number for Phone Number 6	***0***	
	Segment 7	User Number for Phone Number 7	***0***	
	Segment 8	User Number for Phone Number 8	***0***	
	Segment 9	User Number for Phone Number 9	***0***	
	Segment 10	User Number for Phone Number 10	***0***	
	Segment 11	User Number for Phone Number 11	***0***	
	Segment 12	User Number for Phone Number 12	***0***	
	Segment 13	User Number for Phone Number 13	***0***	
	Segment 14	User Number for Phone Number 14	***0***	
	Segment 15	User Number for Phone Number 15	***0***	
	Segment 16	User Number for Phone Number 16	***0***	
228	HOMETEXT REPORT GROUPS FOR PHONE NUMBERS 1-16			
	Segment 1	Assigned Report Groups to Phone 1	***1-0-0-0-0-0-0-0***	
	Segment 2	Assigned Report Groups to Phone 2	***0-0-0-0-0-0-0-0***	
	Segment 3	Assigned Report Groups to Phone 3	***0-0-0-0-0-0-0-0***	
	Segment 4	Assigned Report Groups to Phone 4	***0-0-0-0-0-0-0-0***	
	Segment 5	Assigned Report Groups to Phone 5	***0-0-0-0-0-0-0-0***	
	Segment 6	Assigned Report Groups to Phone 6	***0-0-0-0-0-0-0-0***	
	Segment 7	Assigned Report Groups to Phone 7	***0-0-0-0-0-0-0-0***	
	Segment 8	Assigned Report Groups to Phone 8	***0-0-0-0-0-0-0-0***	
	Segment 9	Assigned Report Groups to Phone 9	***0-0-0-0-0-0-0-0***	
	Segment 10	Assigned Report Groups to Phone 10	***0-0-0-0-0-0-0-0***	
	Segment 11	Assigned Report Groups to Phone 11	***0-0-0-0-0-0-0-0***	
	Segment 12	Assigned Report Groups to Phone 12	***0-0-0-0-0-0-0-0***	
	Segment 13	Assigned Report Groups to Phone 13	***0-0-0-0-0-0-0-0***	
	Segment 14	Assigned Report Groups to Phone 14	***0-0-0-0-0-0-0-0***	
	Segment 15	Assigned Report Groups to Phone 15	***0-0-0-0-0-0-0-0***	
	Segment 16	Assigned Report Groups to Phone 16	***0-0-0-0-0-0-0-0***	
229	Max. number of concatenated SMS messages		***4***	

LOC	DESCRIPTION	DEFAULT	PROGRAMMING DATA
230-231	Reserved		
232	HomeText Phone Number 1	***14-14-14-

LOC	DESCRIPTION	DEFAULT	PROGRAMMING DATA
246	HomeText Phone Number 15	***14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14***	
247	HomeText Phone Number 16	***14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14***	
248	HomeText Password for Phone Number 1		
249	HomeText Password for Phone Number 2		
250	HomeText Password for Phone Number 3		
251	HomeText Password for Phone Number 4		
252	HomeText Password for Phone Number 5		
253	HomeText Password for Phone Number 6		
254	HomeText Password for Phone Number 7		
255	HomeText Password for Phone Number 8		
256	HomeText Password for Phone Number 9		
257	HomeText Password for Phone Number 10		
258	HomeText Password for Phone Number 11		
259	HomeText Password for Phone Number 12		
260	HomeText Password for Phone Number 13		
261	HomeText Password for Phone Number 14		
262	HomeText Password for Phone Number 15		
263	HomeText Password for Phone Number 16		
264	Home Text Language Selection for Phone Number 1	___	
265	Home Text Language Selection for Phone Number 2	___	
266	Home Text Language Selection for Phone Number 3	___	
267	Home Text Language Selection for Phone Number 4	___	
268	Home Text Language Selection for Phone Number 5	___	
269	Home Text Language Selection for Phone Number 6	___	
270	Home Text Language Selection for Phone Number 7	___	
271	Home Text Language Selection for Phone Number 8	___	
272	Home Text Language Selection for Phone Number 9	___	
273	Home Text Language Selection for Phone Number 10	___	
274	Home Text Language Selection for Phone Number 11	___	
275	Home Text Language Selection for Phone Number 12	___	
276	Home Text Language Selection for Phone Number 13	___	
277	Home Text Language Selection for Phone Number 14	___	
278	Home Text Language Selection for Phone Number 15	___	
279	Home Text Language Selection for Phone Number 16	___	

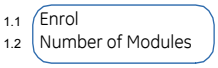
Choose from

language	ISO 639 ID	language	ISO 639 ID
Danish	dan	Italian	ita
Dutch	nla	Norwegian	nor
English	eng	Polish	pol
Finnish	fin	Portuguese	por
French	fra	Spanish	esl
German	deu	Swedish	sve

LOC	DESCRIPTION		DEFAULT	PROGRAMMING DATA
280-282	Reserved			
283	X-10 HOUSE CODE FOR OUTPUTS 1 – 10 (HOMETEXT CONTROL)			
	Segment 1	X-10 House Code output 0	***0***	
	Segment 2	X-10 House Code for output 1	***1***	
	Segment 3	X-10 House Code for output 2	***2***	
	Segment 4	X-10 House Code for output 3	***3***	
	Segment 5	X-10 House Code for output 4	***4***	
	Segment 6	X-10 House Code for output 5	***5***	
	Segment 7	X-10 House Code for output 6	***6***	
	Segment 8	X-10 House Code for output 7	***7***	
	Segment 9	X-10 House Code for output 8	***8***	
	Segment 10	X-10 House Code for output 9	***9***	
284	X-10 UNIT CODE FOR OUTPUTS 1 – 10 (HOMETEXT CONTROL)			
	Segment 1	X-10 Unit Code for output 0	***0***	
	Segment 2	X-10 Unit Code for output 1	***1***	
	Segment 3	X-10 Unit Code for output 2	***2***	
	Segment 4	X-10 Unit Code for output 3	***3***	
	Segment 5	X-10 Unit Code for output 4	***4***	
	Segment 6	X-10 Unit Code for output 5	***5***	
	Segment 7	X-10 Unit Code for output 6	***6***	
	Segment 8	X-10 Unit Code for output 7	***7***	
	Segment 9	X-10 Unit Code for output 8	***8***	
	Segment 10	X-10 Unit Code for output 9	***9***	

Chapter B7 Enrolling modules

Figure 27. Enrol menu



To enrol and default the system modules, you must enable the advanced menu. Select *Maintenance Mode>Advanced Menu>Enabled* and press **OK**.

Enrolling the system modules

When you select the enrol modules process, new modules are enrolled on both the control panel and the keypad. The keypad must enrol modules in order to display the relevant menu options.

1. Press **OK** at the system prompt and enter your installer code.
2. Navigate with the ↑↓ keys to *Enrol Modules>Enrol* and press **OK**.
3. The keypad starts enrolling the modules. The *Enrolling* message is displayed while enrolment is taking place (approximately 12 seconds). When the modules have been enrolled, a beep sounds and the message disappears.
4. When the modules have been enrolled, the keypad returns to *Enrol*.
5. Verify the enrolled modules. Navigate with the ↑↓ keys to *Maintenance Mode* and press **OK**.
6. Scroll to *Log Review* and press **OK**. When the control panel enrols a module, it adds an enrol event to the event log. This event contains the module number. Scroll through the event log to verify that each module has been enrolled.

Note: The modules are enrolled each time you leave programming mode. In this case, the Enrolling message is displayed but no beep sounds.

Note: Installer should enroll the system after adding or deleting NX devices. Not doing this can cause unexpected messages or tamper alarms.

Defaulting the modules

Each module can be defaulted. It is recommended that you default each module before modifying its settings.

1. Navigate with the ↑↓ keys to *Reset Settings* in the relevant module menu and press **OK**. In this case, select *Control Panel>Reset Settings* to restore the default control panel settings.
2. A confirmation message is displayed. Press **OK** to accept the default settings.
3. The keypad sounder beeps once to confirm the reset.

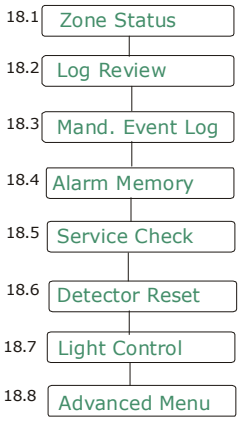
Glossary

Location	Term	Definition
17	**Enrol Modules**	A menu option that activates the process by which the control makes an internal list of all keypads and modules connected to the system.
17.1	**Enrol**	A menu entry that groups enrolled module information.
17.2	**Number of Modules**	A menu option that displays the total number of installed modules.

Chapter B8 Reading the event log

Overview

Figure 28. Maintenance Mode menu structure



The event log displays the details of all the events that occur from when you turn the system on. A maximum of 512 events are held in the event log.

To read the event log:

1. Press **OK** at the system prompt and enter your installer code.
2. Navigate with the ↑↓ keys to *Maintenance Mode* and press **OK**.
3. Scroll to *Log Review* and press **OK**.
4. The last event added to the log is shown. The > symbol indicates that the message must be scrolled horizontally.

   Press **F5** (▶) to scroll to the right and view the rest of the event description. Table 36 *Event description* explains each part of the event description.

Alarm P3 Warehouse 17:32 25/09 48>	Press F5 (▶)	Warehouse 48 Office 028

   - In this case, an alarm occurred in zone 48 (with the assigned zone name *Office*) in partition 3 (with the assigned partition name *Warehouse*) at 17:32 on September 25. No report was sent to the central station. This is the twenty-eighth event in the log.

5. Press the ↑↓ keys to scroll through the events in the log.

Table 36. Event description

Event description	Explanation
L1	Event Type PN Partition Name
L2	HH:MM DD/MM UN/ZN Zone/User Name LOG
Event Type	The type of event that occurred.
PN	The number of the partition in which the event occurred.
Partition Name	The name of the partition in which the event occurred.
Zone/User Name	The zone name or user name.
UN/ZN	The user number, zone number or device number.
HH:MM	The hour and the minute the event occurred.
DD/MM	The day and month the event occurred.
LOG	The position of the event in the event log.

Event log events

Table 37. Event list

Event message	Explanation
10 unsuccessful download attempts	This is a security feature. This event occurs if someone tries to hack into the system.
Alarm	An alarm has been tripped.
Alarm Restore	See *Alarm* event message.
Autotest	An autotest message was sent to the central station.
Aux Com Fail	Failure to communicate with the external module, for example, the TCP/IP module.
Aux Com Fail Restore	See *Aux Com Fail* event message.
Box Tamper	A box tamper.
Burglary	A burglary zone has been tripped.
Burglary Restore	See *Burglary* event message.
Bus Fault	Panel detects when bus is shorted to ground, forced to High level or there is a problem with receiving valid bytes. About 8 seconds after this problem is detected this event will be logged and the external bus will get disconnected for about 5 minutes. If this situation does not disappear after 5 minutes then the external bus will be disabled for another 5 minutes. Entering installer code will log *Bus Fault Restore* event and enable the bus again.
Bus Fault Restore	See *Bus Fault* event message.

Event message	Explanation
Bypass	A zone is bypassed.
Bypass Restore	See *Bypass* event message.
Cancel	The report to the central station has been cancelled. This occurs when a user enters a code after an alarm.
CleanMe	A smoke detector is dirty.
CleanMe Restore	See *CleanMe* event message.
Clock Set	A user set the date and time.
Close (arm)	Closing (arm) by a specific user.
Code Entry	The lock of the access reader has been triggered. The lock can be triggered by an accepted proximity card or by an Egress switch. An Egress switch is a button that can be pressed by a user to open the lock of the door. It can also be called Request-to-Exit (RTE). When the Code Entry option is activated, the reader sends a log message to the control panel, indicating that the lock has been triggered.
Cross-Trip	Tripping the cross zone.
Data Lost	The panel has been unable to send alarm messages to the central station. The panel tries to send these messages a number of times as specified in the FTC (dial attempts before Fail to Communicate). Any pending reportable events are lost.
Device Tamper Restore	See *Box Tamper* event message.
Device Tamper Restore	See *Box Tamper* event message.
Disarm from Alarm	A user disarmed the panel during an alarm.
Duress	A duress code entered by a user. An alarm message is sent to the central station.
Early Open	A user disarmed the system before the open time specified in the panel schedules.
End Download	The end of an up/download.
End Prog	End programming. The installer left programming mode.
End Walktest	See *Walktest* event message.
Enrolled	Modules are enrolled on the bus. The module numbers are recorded.
Exit Error	An exit door remained open after the exit delay expired.
Expander Fault Restore	See *Expander Trouble* event message.
Expander Trouble	A problem with an expander module.
Expansion Event	A bus device generated an event to report conditions not described by other events.
Fail to Communicate	The control panel or module tried to send a message to a central station but failed.
Fault Restore	See *Trouble* event message.

Event message	Explanation
Fire	A fire alarm has been tripped.
Fire Restore	See *Fire* event message.
First Open	The time at which the first partition was opened.
Forced Door	The door was opened without an authorisation from the system.
Forced Door Restore	See *Forced Door* event message.
Ground Fault	Grounding problem occured.
Ground Fault Restore	See *Ground Fault* event message.
Keypad Tamper	A keypad tamper.
Last Close	The time at which the last partition was closed.
Late Close	A user disarmed the system after the closing time specified in the panel schedules.
Line Fault	Telephone line faults.
Line Fault Restore	See *Telephone Fault* event message.
Listen-in	The start of a listen-in session.
Log Full	The event log is full and the events must be reported to the up/download software. An event can also be sent to the central station.
Low Batt Restore	See *Low Battery* event message.
Low Battery	The standby battery for the control panel/expansion module is low.
Mains Fail Restore	See *Mains Failure* event message.
Mains Failure	The 220 V has disappeared.
Manual Fire	A manual fire alarm generated by pressing the keys **1** and **3** on the keypad.
Manual Test	A manual test call to the central station.
Medical (Aux2)	A medical alarm generated by pressing the keys **4** and **6** on the keypad.
Off-normal Autotest	Off normal automatic test result.
Open (disarm)	Opening (disarm) by a specific user.
Output Restore	See *Output* event message.
Output Trip	An output has been activated.
Over-current	An excessive amount of current has been drawn from one of the outputs.
Over-current Restore	See *Over-current* event message.
PA Panic Alarm	A personal attack alarm has been tripped.
Panic Keypad	A panic alarm generated by pressing the function key on the keypad.

Event message	Explanation
Partarm	Part arm of the system by a specific user.
Pulse count	Displays the puse count from a shock sensor zone and the zone number after an alarm.
RAM Check Failure	Failure of the RAM check.
Recent Closing	An alarm occurred within five minutes of the panel being armed.
Re-exit	A special feature of false alarm prevention.
Reset	A user has manually reset a smoke detector.
RF Jam Restore	See *RF Jammed* event message.
RF Jammed	RF jamming.
RF Low Battery	An RF transmitter has reported a low battery.
RF Low Battery Restore	See *RF Low Battery* event message.
ROM Check Failure	Failure of the ROM check.
Service End	End of the 'Installer on-site' (service mode).
Service Start	Start of the 'Installer on-site' (service mode).
Shutdown	Remote system shutdown executed by the installer.
Shutdown Restore	See *Shutdown* event message.
Silent Panic	A silent panic alarm.
Siren Tamper	A siren tamper.
Siren Tamper Restore	See *Siren Tamper* event message.
Start Download	The start of an up/download.
Start Prog	Start programming. The installer entered programming mode.
System Inactivity	The system was inactive for a period of time longer then the preset time.
Tamper	A tamper.
Tamper Restore	See *Tamper* event message.
Trouble	A trouble condition.
Walktest	The start of a walktest.
Zone Inactive Restore	See *Zone Inactivity* event message.
Zone Inactivity	A zone inactivity monitoring event.
Zone Lost	An RF transmitter has lost the supervision with the wireless receiver. This happens when the transmitter has not reported its supervision message to the RF receiver within the long supervision window. See appendix 5.
Zone Lost Restore	See *Zone Lost* event message.

Note: Soak test events are placed in the event log with an asterisk beside them. They are not reported.

Glossary

Location	Term	Definition
18	**Maintenance Mode**	A menu entry that groups options relating to issuing commands by the installer.
18.1	**Zone Status**	A menu entry that indicates the zone status.
18.2	**Log Review**	A menu command that is used to view the event log. The event log is a list of events that occur in the system, regardless of the armed state of the system. They are held in a sequential event buffer with a time and date stamp. When the log is full, it overwrites the oldest entries with new data. These events can later be viewed through downloading.
18.3	**Mand. Event Log**	A menu command that is used to view the mandatory event log.
18.4	**Alarm Memory**	A menu option that displays a list of alarms and where they occurred. Only the alarms that have occurred during the last arm/disarm cycle are shown in the alarm memory log. The way the list of alarms is displayed depends also on a setting of the First Alarm Logic menu option (see First Alarm Logic).
18.5	**Service Check**	A menu command that is used to verify service messages. The service message disappears when the installer enters and then leaves programming mode. If User Code Resets Tamper Memory is enabled, a user can reset the service message by entering a user code.
18.6	**Detector Reset**	A menu command that resets two-wire and four-wire smoke detectors and the Fire symbol display on the keypad. For hardwired smoke detectors, the power supply to the smoke detectors is cut temporarily. RF smoke detectors have an auto reset because the RF communication is uni-directional (from RF detector to RF receiver). This command does not reset RF smoke detectors but should still be used to reset the Fire symbol displayed on the keypad.
18.7	**Light Control**	A menu option that lists the X-10 devices that can be turned ON/OFF.
18.8	**Advanced Menu**	A menu option that activates certain options in the installer menu structure.

Chapter B9 NX-586E

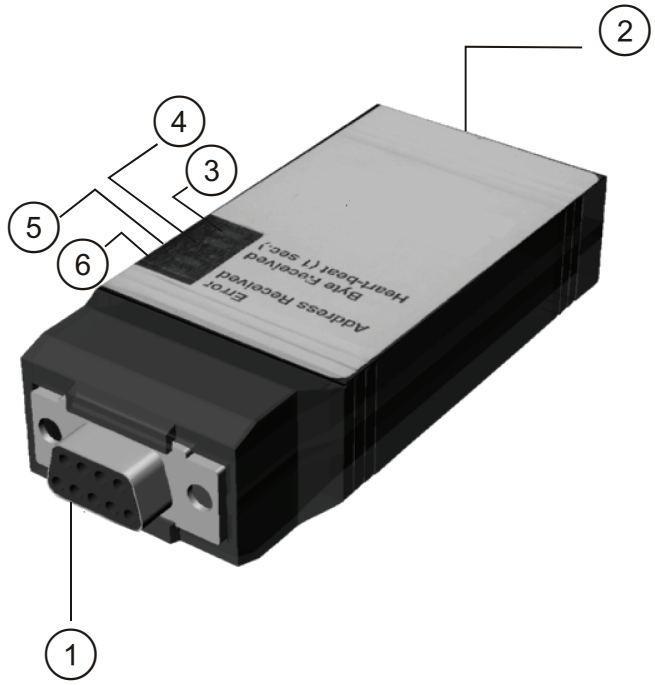
Overview

The NX-586E direct connect module is an optional device used to interface the up/download software directly to the control panel when the on-board serial port is not available. The NX-586E direct connect module has four programming memories. The NX-586E can store up to four (4) NetworX alarm panel configurations (panel only, no modules) within its own non-volatile memory. These files can be created using the DL900 software (1.13 or later) without a panel attached (power must still be supplied). The files can also be created using the installer program mode on any existing NetworX panel without the need for any computer. The files stored on the Direct Connect unit can be transferred to any panel of the same type or read by the DL900 software for reviewing, editing and archiving purposes.

Connecting the NX-586E direct connect module

Connecting the NX-586E to a PC

Figure 29. NX-586E



①	RS232 connector	④	Waiting for bus communication LED
②	RJ11 (rear-entry connector)	⑤	Sending data LED
③	Waiting for host communication LED	⑥	Receiving data LED

6. Connect the NX-586E direct connect module to the serial port of the PC. The layout of the 25 PIN serial connector on the PCB is:

Table 38. NX-586E direct connect module serial connector

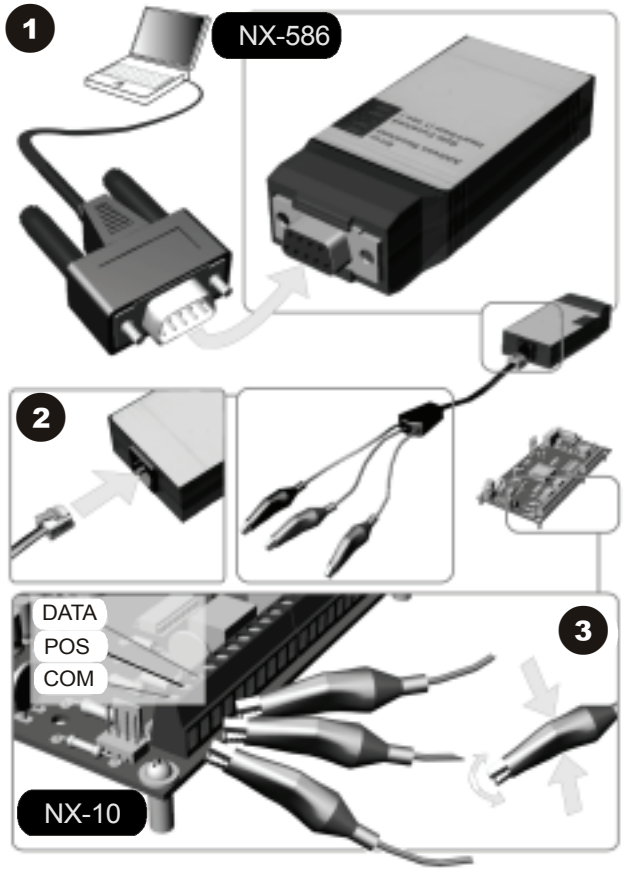
Sub	D9	D25
RXD	PIN 2	PIN 3
TXD	PIN 3	PIN 2
GND	PIN 5	PIN 7

7. Connect the cable to the NX-586E direct connect module.
8. Using stripped wires, connect the cable with alligator clips to a NetworX V3 panel as follows:
   - Red to POS
   - Black to COM
   - Green to DATA

Connecting the NX-586E to a PC and a panel

Connect the NX-586E direct connect module to the serial port of the PC and the panel as shown in the previous section.

Figure 30. Connecting the NX-586E to a PC and a panel



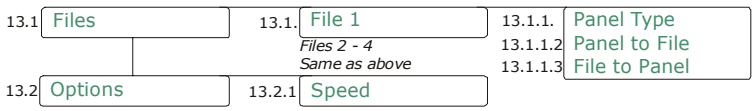
Connecting the NX-586E to a panel

Connect the cable with alligator clips to a NetworX V3 panel as follows:

- Red to POS
- Black to COM
- Green to DATA

Programming the NX-586E direct connect module

Figure 31. NX-586E menu structure



The control panel's programming memory can be copied to one of the four programming memories in the NX-586E direct connect module and vice-versa. You must enrol and default the module before you begin to program the system. For more information on enrolling and defaulting, see Chapter B7 *Enrolling modules*.

To program the NX-586E using the NX-1048 keypad, select *Installer Menu>NX-586E Direct Connect Module.* To program the NX-586E using a PC, start the DL900 up/download software on the PC.

Note: It is recommended to up/download data when the keypad is in the operating mode only (not in the programming mode). If you are in the Installer Menu the keypad can time out and start copying process which will interfere with or stop up/downloading in progress.

Enabling memory transfer using the keypad

The following example uses the NX-1048 keypad to copy the control panel's programming memory to the NX-586E programming memory 2. It then copies programming information from the NX-586E programming memory 3 to the control panel.

1. Navigate with the ↑↓ keys to *NX-586E Direct Connect Module>Files* and press **OK**.
2. To write information from the control panel to the NX-586E, scroll to *File 2>Panel to File* and press **OK**.
3. Select *Yes* to confirm and press **OK**.
4. The control panel's programming memory is copied to the NX-586E direct connect module's programming memory 2. The Receiving Data LED on the NX-586E direct connect module flashes while the data is received. The keypad sounder chimes when the operation is successful.
5. To read information from the NX-586E to the control panel, scroll to *File 3>File to Panel* and press **OK**.
6. Select *Yes* to confirm and press **OK**.
7. The information in the NX-586E programming memory 3 is copied to the current control panel. The Sending Data LED on the NX-586E direct connect module flashes while the data is received. The keypad sounder chimes when the operation is successful.
8. A triple beep sounds if any error occurs when reading or sending data.

Panel to PC memory transfer using DL900 software

1. Start the DL900 upload/download software.
2. Select: *Program>Setup>Direct Connect Settings*.
3. Select the correct port number and baud rate. Protocol must be Binary (default). The baud rate should match the NX-586E. Default is 9600. Click OK.
4. Select the account to use.
5. Select *Download>Direct Connect.*

Note: You can also use the tool bar or the [F11] key.

6. Download as normal. You cannot perform the following:
   - View keypad status
   - Enroll devices

Writing data from the DL900 software to the NX-586E

Note: In the next steps, COM and POS can be connected to any 12 VDC source, and DATA does not need to be connected.

1. Start the DL900 upload/download software.
2. Select: *Program>Setup>Direct Connect Settings.*
3. Select the correct port number and baud rate. Protocol must be Binary (default). The baud rate should match the NX-586E. Default is 9600. Click OK.
4. Select the account to use.
5. Select: *Download>Write Panel Data To 586.*
6. You will be warned this could overwrite user codes (if they were changed by the user).
7. Select the location in the NX-586E where the data will be stored.

Note: This will overwrite the existing data without further prompting.

8. A screen will appear indicating that the data is being sent. When this screen disappears, the process is complete.

Reading data from the NX-586E to the DL900 software

Note: In the next steps, COM and POS can be connected to any 12 VDC source, and DATA does not need to be connected.

1. Start the DL900 upload/download software.
2. Select: *Program>Setup>Direct Connect Settings.*
3. Select the correct port number and baud rate. Protocol must be Binary (default). The baud rate should match the NX-586E. Default is 9600. Click OK.
4. Select the account to use.
5. Select: *Download>Read Panel Data From 586.*
6. Select the location in the NX586E from which the data will be retrieved.
7. A screen will appear indicating that the data is being read. When this screen disappears, the process is complete.

Location programming for the NX-586E

The only location used on the NX-586E is location 0. The seven segments have the following functions and meaning:

Table 39.

Segment 1 Used to set the task to perform (read or write) and display the result of the task requested.

0 = Idle condition	
1 = Read panel configuration into a file	**COMMAND**
2 = Write a file's configuration into the panel	**COMMAND**
10 = Working	**RESULT**
11 = Invalid command; installer entered a value other than 1 or 2	**RESULT**
12 = Invalid file number; installer entered a file number other than 1-4	**RESULT**
13 = Incorrect panel type; the panel and file types do not match	**RESULT**

14 = Incorrect access code; the panel and file access code do not match	**RESULT**
15 = Timeout; the requested command had no data exchange for 3 seconds	**RESULT**
16 = Aborted; the previous command was aborted by attempting another command	**RESULT**
20= Transfer successful; the previous read or write command was successful	**RESULT**

Segment 2 — Used to hold the file number for the requested read or write command. The only valid values are 1-4. This segment is always set to 0 after any command to prevent accidentally overwriting an incorrect file.

Segments 3 - 6 — Used to indicate the panel type stored in files 1-4 respectively.

Results 1 - 3 applies to the standard NetworX panels (NX-4 / NX-6 / NX-8).

Result 4 applies to the NX-8E panel.

Result 10 applies to the NX-4V2 panel

Result 11 applies to the NX-6V2 panel

Result 12 applies to the NX-8V2 panel

Result 15 applies to NetworX V3 panel.

Segment 7 — Used to set the baud rate for the RS-232 connection (must match that of the DL-900 program). The valid values are 0-7 and will be reset to 4 (9600 baud - factory default) if set incorrectly.

0= 600 Baud	**2**= 2400 Baud (2.4K)	***4= 9600 Baud (9.6K)***	**6**= 38400 Baud (38.4K)
1= 1200 Baud (1.2K)	**3**= 4800 Baud (4.8K)	**5**= 19200 Baud (19.2K)	**7**= 76800 Baud (76.8K)

Glossary

Location	Term	Definition
13	**NX-586E**	A menu optional device used to interface the up/download software directly to the control panel when the on board serial port is not available.
13.1	**Files**	A menu entry that groups the four programming memories in the direct connect module.
13.1.1	**File 1**	A menu option that selects the programming memories within the direct connect module. There are four possible programming memories.
13.1.1.1	**Panel Type**	A menu option that displays panel type information currently stored in one of the four programming memory files in the direct connect module.
13.1.1.2	**Panel to File**	A menu option that copies a panel's programming to one of the programming memories in the direct connect module. There are four possible programming memories in the NX-586E.
13.1.1.3	**File to Panel**	A menu option to copy programming memory from one of the four memory locations contained in the direct connect module, to the control panel.
13.2.1	**Speed**	A menu option that sets the data communications speed from the NX-586E direct connect module to the control panel. This can be set from 600 baud to 76.8k baud. It is recommended to use the default setting of 9600 baud.

Technical Specifications

Power supply specifications		
Power supply voltage		12V ⎓ ± 2%
Consumption		30 mA at 12V ⎓ ± 2%
General feature specifications		
Housing Size	Dimensions (width x height x depth)	42x96x22 mm
Environmental	Operating temperature	+0° C to + 40 °C
	Humidity	Max 93% non condensing
	Shipping Weight (including bus cable)	120 g
Telephone	Telephone requirement	Touchtone

Chapter B10 Programming with the DL900 software

Other methods of programming

You can program the system using the NX-1048 keypad or using the DL900 software. This software allows you to download the programming information on the control panel to the computer running the DL900 software, change it and upload the changes from the computer to the panel. It also allows you to view the program log and event log. To program the system using this software, you must connect the control panel to the computer.

Note: If you want to change the download access code, you have to do it both in the panel through the menu (*Control Panel>Communications>Up/Download>DL Access Code*) and in the DL900 program (*Control Panel>Advanced>Download access>Access code*), otherwise DL900 will use a default access code.

Connecting the panel to the computer

You can connect the control panel to the computer either directly via the RS232 serial port or remotely via a modem.

Connecting using a serial port

Connecting via a serial port is useful if you are on site and want to connect directly to the alarm system.

The connection to the NetworX V3 panel is made through the RS232 port using the NX-586E module, which provides a standard RS232 bi-directional DB-9 connector. The NX-586E can be used as a programming tool on any panel, as it is connected to the data bus. It stores control panel settings that can be up/downloaded using the keypad or a computer. For more information on reading data from the NX-586E, see Chapter B9 *NX-586E*.

To use the DL900 software with a direct connection:

1. Double click the icon for the software or click *Start>Programs>Caddx>DL900*.
2. The *DL900 Download Software* window and the *Master access* screen open.
3. Enter the operator name and password and click **OK**.
4. The *Operator access* screen opens.
5. Enter the current operator and password and click **OK**.
6. To connect to the panel directly via the serial port, select *Download>Connect>Direct connect using 586*. The *Connecting* message box opens.

7. To connect to the panel via a TCP/IP network, select *Download>Connect>Connect TCP/IP*. The *IP Address* screen opens. Enter the IP address and click **OK**.
8. When you are finished uploading or downloading, select *Download>Disconnect*.

Note: The default operator is Caddx and the default password is 1234. You may have to enter this twice.

Connecting using a modem

You can connect the control panel to the computer remotely via a modem. This can be useful if you are not on site and want to connect to the alarm system.

You can connect normally or connect using answering machine defeat (AMD). If you use AMD, the automatically timed two-call-answer-machine-defeat sequence is used.

To use the DL900 software with a modem connection:

1. Follow steps 1 - 5 in *Connecting using a serial port* above.
2. Make sure that the modem settings are correct. For more information about modem settings, see the *DL900 Online Help*.
3. Select *Download>Connect> Connect Using AMD*.
4. A message box opens saying *Initializing modem*.
5. The computer connects to the panel.
6. When you are finished uploading or downloading, select *Download>Disconnect* or click the **Disconnect** icon.

Note: Not all modems are supported. For a list of compatible modems, please contact GE Security.

Programming with upload/download software

Downloading allows you to read the existing programming data or the event log from the control panel. Uploading allows you to send programming data, that you have set up using the DL900 software, from the computer to the control panel. When you program the system using DL900, the keypad can be reset after the system is powered down. This prevents text getting lost.

Before you download or upload information, do the following:

1. Ensure that the relevant control panel options are programmed correctly. There are a minimum number of options that you must set before you can program the control panel using the up/download software.
2. Ensure that the up/download access code is the same in both the up/download software and the control panel. See chapter A-1 *Introducing the NetworX V3 system* for the correct default code.
3. If you are connecting remotely, make sure that the modem settings are correct. For more information about modem settings, see the *DL900 Online Help*.
4. Connect to the panel via the serial port or modem.
5. Select *Download>Read all* to download all the data from the control panel. The computer downloads the data from the panel.

6. Select *Download>Send all* to upload all the data to the control panel. The computer uploads the data to the panel.

The data that is downloaded and the downloading speed depend on the *Send All/Read All* settings. The default number of strings sent to the keypad is 192 but it is possible to limit the number of strings sent. If the default number is reduced, download time decreases. For more information on setting up/download options, see the *DL900 Online Help*.

Note: It is recommended to up/download data when the keypad is in the operating mode only (not in the programming mode). If you are in the Installer Menu the keypad can time out and start copying process which will interfere with or stop up/downloading in progress.

Programming tasks

You can perform all available programming tasks using the DL900 software. Table 40 *DL900 menu paths* shows the DL900 menu path for each task.

Table 40. DL900 menu paths

Task	DL900 menu option
Adding customer notes	View>Customers>Notes
Adding operators	Program>Setup>Add/Change operators
Backing up the database	Tools>Backup database
Changing a customer record	View>Customers>Single customer
Changing a master or operator password	Program>Change password
Changing operator rights	Program>Setup>Add/Change operators
Changing the download options	Program>Setup>Download options
Changing the partitions	Control Panel >Main>Partition
Changing the report settings	Control Panel >Main>Phone numbers
Changing the system 1 settings	Control Panel >Main>System 1
Changing the system 2 settings	Control Panel >Main>System 2
Changing the system 3 settings	Control Panel >Main>System 3
Changing the DL900 settings	Program>Setup>Program setup
Changing the user arm/disarm codes	Control Panel >Main>Codes
Compacting the database	Tools>Compact database
Connecting via the modem	Download>Connect >Connect using AMD
Connecting via the serial port	Download>Connect>Direct connect using 586
Copying a customer's panel settings	Program>Setup>Copy options

Task	DL900 menu option
Deleting a customer record	View>Customers>Single customer
Deleting the event log	Download>Event log>Delete Event log
Downloading	Download>Send all
Downloading and updating the device list	Download>Device list>Enroll devices
Downloading the event log	Download>Event log>Read entire log
Exporting a database	Tools>Export database
Importing a database	Tools>Import database
Loading the default settings	Control Panel>Default Control data from>Factory defaults
Logging in	Start>Programs>Caddx>DL900
Printing a customer record list	Program>Print preview>Customer list
Printing a program log	Program>Print preview>Program log
Printing a programming worksheet	Program>Print preview>Programming worksheet
Printing an operator list	Program>Print preview>Operator list
Printing customer notes	Program>Print preview>Notes
Printing the event log	Program>Print preview>Event log
Programming the NX-1701E	Expanders>NX-1701E>1
Programming the NX-320-I	Expanders>NX-320-I>1
Programming the NX-507E/NX-508E	Expanders>NX-507E/NX-508E>1
Programming the NX-534E	Expanders>NX-534E
Programming the NX-535	Expanders>NX-535
Programming the keypad text	Expanders>Keypad text
Programming the keypads	Expanders>Keypad options>Partition 1>Keypad 1
Programming the wireless receivers	Expanders>Wireless>1
Programming the zones	Control panel>Main (Zones tab)
Repairing the database	Tools>Repair database
Restoring the database	Tools>Restore database
Retrieving and viewing a customer record	View>Customers>Single customer
Running diagnostics	Tools>Diagnostics
Setting auto call back options	Program>Setup>Auto callback
Setting customer account options	View>Customers>Account options
Setting the country and language	Program>Setup>Country/Language

Task	DL900 menu option
Setting the download access	Control Panel>Advanced>Download access
Setting the format overrides	Control Panel>Advanced>Overrides
Setting the outputs	Control Panel>Advanced>Auxiliary outputs
Setting the TCP/IP settings	Program>Setup>TCP/IP Settings
Setting the timed functions	Control Panel>Advanced>Autotest and clock
Setting the zone type	Control Panel>Advanced>Zone types
Setting up a customer record	View>Customers>Single customer
Setting up a modem	Program>Setup>Modem setup
Setting up answering machine defeat	Program>Setup>AMD setup
Specifying the direct connect settings	Program>Setup>Direct connect settings
Switching operators	Program>Next operator
Uninstalling the software	Start>Settings>Control Panel
Uploading	Download>Read all
Viewing a customer record list	View>Customers>List
Viewing an operator list	Program>Setup>Add/Change operators
Viewing the auto answer failures	View>Customers>Auto answer failures
Viewing the control panel settings	Control panel>Main
Viewing the event log	Download>Event log>Read entire log
Viewing the keypad status	View>Keypad status

Chapter B11 Updating firmware

Overview

You can upgrade the NetworX V3 system firmware if necessary. Upgrading to a new version may be required in order to add a new functionality to the system, add another language to the interface, include additional menu options or to fix potential problems.

To upgrade the firmware you need the following:

- PC with Windows OS and .NET Framework 2.0 installed;
- USB cable with a mini-USB connector fitting the mini-USB socket on the panel or the keypad board;
- flash tool (Flasher application and driver);
- upgrade files (files with the .fdk extension) for the panel and/or for appropriate system modules.

CAUTION: If the NX-9104 VVMIQ module is installed in the system, before upgrading firmware disconnect the ribbon cable connecting the VVMIQ module with the control panel.

CAUTION: Do not connect the control panel or the keypad to the computer if the firmware upgrade software is not installed!

Update procedure

1. Install the flash tool (Flasher application and a driver) on the computer. For more information, see the installation instructions included with the Flasher application.
2. Start installer mode in the alarm system using the keypad.
3. Deactivate the box tamper switch on the relevant board.

If connecting the USB cable to the control panel board:

- Navigate with the ↑↓ keys to *Control Panel>System Settings>Feature Select>Inputs>Box Tamper* and press **OK**.
- Select *Disabled* and press **OK**.

If connecting the USB cable to the keypad board:

- Navigate with the ↑↓ keys to *This Keypad>Keypad Features>Case Tamper* and press **OK**.
- Select *Disabled* and press **OK**.

4. Start the Flasher application, and check what ports are available in the *Available Ports* list. Make notes if the list is long.

5. Connect the USB cable to the computer.
6. Open the panel housing or the keypad enclosure and connect the mini-USB cable connector to the mini-USB socket on the panel (see *Figure 1*, position ⑱) or on the keypad board.
7. If the NX-9104 VVMIQ module is installed, disconnect the power supply (both mains and battery), disconnect the ribbon cable connecting the VVMIQ module with the control panel, and reconnect the power supply.
8. Click *Refresh* button in the Flasher interface. An additional new port will display in the *Available Ports* list, for example, *COM 5*. Under normal circumstances, it is the COM port with the highest number, and it gets selected automatically. Select the new port in the list, if necessary.
9. In the Flasher application, select the element you want to upgrade (Control board, GSM module, Radio module or Keypad), click the "**...**" (Browse) button next to it, and open the appropriate *.FDK file for this element on your computer.
10. If you like to verify if the new file contains a different firmware version than the one already programmed in the panel or the other module you want to update, click Verify to compare the contents and to display a status message.
11. Click the *Program* button. The upgrade operation starts, and the status bar displays progress. Also the keypad displays progress messages. After all data is copied, "Flasher success" message displays on the computer.
12. Repeat steps 8 to 10 for all the modules you want to upgrade.
13. Unplug the mini-USB connector from the board.
14. If the NX-9104 VVMIQ module was disconnected in step 7, disconnect the power supply, connect the VVMIQ ribbon cable, and then reconnect power to the panel.
15. Close the housing.
16. Start installer mode and enable the previously disabled tamper switch using the menu (select *Enabled* in step 3).

IMPORTANT: After the Radio Module is reflashed, it must be defaulted or fully programmed with the NX-586E direct connect module with the previously stored sensor configuration.

Section C References

Appendix 1: Reporting codes in Contact ID or SIA

Table 41 *Event codes* lists the event codes sent for different reports (if enabled) when using Contact ID or SIA formats. The numbers in brackets following the event is the number that is reported as the zone number. If there are no parentheses, the zone is **0**. An asterisk represents the first character from the event code of the zone that is bypassed or in fault.

Table 41. Event codes

Report	Contact ID	SIA	Report	Contact ID	SIA
AC fail	301	AT	Panic	120	PA
AC fail restore	301	AR	RAM Check Failure	303	IA
Alarm restore	000	R	Recent closing (user number)	459	CR
Auto-test	602	RP	RF FM jam	344	XQ
AUX Comm Fail	304	YN	RF FM jam restore	344	XH
AUX Comm Fail Restore	304	YN	RF jam	344	XQ
Auxiliary 2 panic	100	MA	RF jam restore	344	XH
Bus Fault	307	IA	ROM Check Failure	304	IA
Bus Fault Restore	307	NR	Silent panic / B-alarm	130	BG
Bypass (zone number)	570	*B	Siren tamper (device number)	321	YA
Bypass restore (zone number)	570	*U	Siren tamper restore (device number)	321	YH
Cancel (user number)	406	OC	Sprinkler supervisory	200	SS
Closed with zones bypassed	456	CG	Sprinkler supervisory restore	200	SR
Closing (user number)	401	CL	Start download	411	RB
Control box tamper	137	TA	Start of cross time	138	UA
Control box tamper restore	137	TR	Start of listen in	606	LF
Control power up	602	RP	Start program	627	LB
Duress	121	HA	System Inactivity	304	YN
Early to open	451	OK	Tamper	137	TA
End download	412	RS	Tamper restore	137	TR
End program	628	LX	Technician left	628	LX
Exit error (user number)	457	EE	Technician on site	627	LB
Expander trouble (device number)	333	ET	Telephone fault	351	LT
Expander trouble restore (device number)	333	ER	Telephone fault restore	351	LR
Fail to communicate	354	RT	Trouble (zone number)	380	*T
Faults Overwrite	408	CF	Trouble restore (zone number)	380	*R
Forced Door	423	DF	TX low battery	384	XT
Forced Door Restore	423	DR	TX low battery restore	384	XR
Ground fault	310	GF	Unknown Event	304	YN

Report	Contact ID	SIA	Report	Contact ID	SIA
Ground fault restore	310	GK	Unknown Event	304	YN
Holdup Event	376	HA	User Code Added	660	JY
Holdup Restore Event	376	HR	User Code Change	660	UC
Keypad tamper	137	TA	User Code Deleted	660	JX
Late to close	454	CI	User Option Change	660	LS
Log full	605	JL	Verified burglary	130	BA
Low battery	309	YT	Verified burglary restore	130	BR
Low battery restore	309	YR	Verified fire	110	FA
Manual fire	110	FA	Verified fire restore	110	FR
Manual test	601	TX	Zone Clean-me	393	YX
Off-normal AutoTest	608	RY	Zone Clean-me restore	393	YZ
Opening (user number)	401	OP	Zone inactive	391	NA
Opening after alarm (user number)	406	OR	Zone inactive restore	391	NS
Over-current (device number)	312	YP	Zone lost (zone number)	381	*T
Over-current restore (device number)	312	YQ	Zone lost restore (zone number)	381	*R

The NetworX V3 has the ability to report SIA level 1 transmissions to either or both phone numbers. Each report in SIA consists of an Event Code and a Zone or User ID. The Zone ID will be the zone number that is in alarm. The event code will come from the chart below, and it will be programmed in the configuration group event code.

Table 42. Reporting zone codes - SIA

Programmed Event Code	SIA Code	Description
0	HA	Holdup Alarm
1	FA	Fire Alarm
2	PA	Panic alarm
3	BA	Burglary Alarm
4	BA	Burglary Alarm
5	BA	Burglary Alarm
6	UA	Untyped Alarm
7	BA	Burglary Alarm
8	BA	Burglary Alarm
9	UA	Untyped Alarm
10	HA	Holdup Alarm
11	MA	Medical Alarm
12	PA	Panic alarm
13	TA	Tamper Alarm
14	RP	Periodic Test
15	GA	Gas Alarm
16	KA	Heat Alarm
17	WA	Water Alarm

Programmed Event Code	SIA Code	Description
18	QA	Emergency Alarm
19	SA	Sprinkler Alarm
20	ZA	Freeze Alarm
21	KH	Heat Alarm Restore
22	FA	Manual Fire Alarm

The NetworX V3 can report Ademco Contact ID transmissions. Each report in Contact ID consists of an Event Code and a Zone ID. The zone ID is the zone that generated the alarm. The event code will come from the chart below, and it will be programmed in the configuration group event code.

Table 43. Reporting zone codes - Contact ID

Programmed Event Code	Contact ID	Description
0	122	Silent Panic
1	110	Fire Alarm
2	120	Panic alarm
3	130	Burglary Alarm
4	131	Perimeter Alarm
5	132	Interior Alarm
6	133	24 Hour Burglary
7	134	Entry Alarm
8	135	Day/Night Alarm
9	150	Non Burglary 24 Hour
10	121	Duress Alarm
11	100	Medical Alarm
12	123	Audible Panic Alarm
13	137	Tamper Alarm
14	602	Periodic Test
15	151	Gas Detected
16	158	High Temp
17	154	Water Leakage
18	140	General Alarm
19	140	General Alarm
20	159	Low Temp
21	158	Heat Alarm Restore
22	115	Manual Fire Alarm

Appendix 2: Overview of module numbers

Every keypad, expansion module and wireless receiver module has a module number.

Table 44. Module numbers

Module	Module number
NetworX V3 control panel	0
NX-507E/NX-508E Output expander modules	24-31
Wireless receivers **Note:** NetworX V3 on-board receiver has the address 32.	32-39
IO Modules (it includes wireless sirens)	52-55
NX-534E Listen-In Module	64
NX-535 Voice Module	77
NX-7002 GPRS Module **Note:** The NetworX V3 may have a GSM/GPRS interface on-board.	78
NX-590E TCP\IP Module	79
NX-9104 VVMIQ Module	65
NX-320-I Auxiliary power modules	84-91

NX-1701E door swipe modules

Table 45. NX-1701E module numbers

Learn-in sequence	Module number	Learn-in sequence	Module number
1	113	9	121
2	114	10	122
3	115	11	123
4	116	12	124
5	117	13	125
6	118	14	126
7	119	15	127
8	120		

Keypads

Table 46. Keypad module numbers

Keypad	Partition 1	Partition 2	Partition 3	Partition 4
1	192	193	194	195
2	200	201	202	203
3	208	209	210	211
4	216	217	218	219
5	224	225	226	227
6	232	233	234	235
7	240	241	242	243
8	248	249	250	251

Appendix 3: Communicator formats

One of several communicator formats can be used to transmit to the receiver connected to phone number 1. Consult the instructions for your central station receiver to determine which format is compatible. Table 47 *Communicator formats* lists the selectable communication formats.

Table 47. Communicator formats

DATA	FORMAT	DESCRIPTION
0	Local	Communicator is disabled
1	Ademco Contact ID	DTMF format
2	Ademco 4/2 Express	DTMF format
3	Reserved	
4	Reserved	
5	Siren Tone Format	Siren sound, for domestic dialling*
6	Reserved	
7	SIA (level 1, supporting level 2 partition modifier and level 3 listen-in block)	FSK format.
8	Reserved	
9	Radionics extended fast with parity	Extended event code 1800 Hz transmit 2300 Hz handshake single round w/parity 40 PPS extended hex capability
10	Reserved	
11	Ademco/Silent Knight Slow	1900 Hz transmit 1400 Hz handshake 10 PPS double round parity
12	Silent Knight 4+2 fast	Two-digit event code 1900 Hz transmit 1400 Hz handshake 20 PPS double round parity
13	Sescoa/Franklin Fast	1800 Hz transmit 2300 Hz handshake 20 PPS hex double round
14	SIA (level 1, supporting level 3 listen-in block)	FSK format
15	Custom format	(See location 18 for the control panel, or *Control Panel>Communications>Custom Format* menu options)
16	Vocal format	Voice messages via NX-535, for domestic dialling*
17	XSIA (level 1, supporting level 3 listen-in block)	FSK format
18	XSIA (level 1, supporting level 2 partition modifier and level 3 listen-in block)	FSK format.

Notes: The siren tone format (format 5) can be kissed off by pressing the "*" key on the telephone set (persistent tone of 250 ms is required).
If you want to trigger a "kiss-off" signal via a GSM, you have to take into account that this function is network provider dependent.
Entering a valid user code on a keypad will stop the dialer when using the siren or vocal format.
If you require a format other than those listed, set the override options in *Control Panel>Communications>Custom Format* to build the appropriate format. In addition, select *Format Override in Communications>Central Station>Phone Numbers>Phone Number n>Protocol.*
The voice dialer protocol does not generate an FTC (failure to communicate).

Appendix 4: Service messages

The keypad displays service messages as a result of manual and automatic tests. Table 48 *Service messages* lists each message and outlines the action you should take to resolve the problem. When the keypad beeps due to a fault condition, press the # key to view the fault condition information.

After pressing the # key faults are displayed in the particular order. The order is as following:

1. Panel overcurrent
2. Siren trouble
3. Box tamper
4. Fail to communicate
5. Line fault
6. Loss of time
7. Mains fault
8. Low battery
9. Remote over current
10. Remote fail to communicate
11. Remote low battery
12. Remote box tamper
13. Expansion trouble
14. Remote siren fault
15. RF jam
16. Zone problem
17. Bus fault

Table 48. Service messages

Message	Definition	Action
Panel Box Tamper	There has been interference with the control panel casing.	Ensure that the casing is mounted correctly on a flat surface and is not damaged. If there is no damage, close the casing securely.
Panel Fail to Communicate	The control panel tried to send a message to the central station but failed.	Ensure that the phone line is connected properly. Use a test phone to check that the phone service is available. Ensure that the central station phone number, account and protocol options are correct.
Panel Loss of Time	The control panel has had a total loss of power and the clock must be reset.	Reset the system clock and date using the *User Menu>Set Date/Time* menu option..

Message	Definition	Action
Panel Low Battery	The standby battery for the control panel is low.	The battery may need replacing. This may be a temporary condition caused by a long power failure.
Panel Over-Current	The control panel has detected an excessive amount of current being drawn from one of the outputs and has disabled the output as a means of protection.	Check the system for wiring faults. An overcurrent message can be reset only by triggering the siren correctly, for example, by generating a tamper on a zone that activates the sirens. This is a security feature to ensure that the overcurrent message has disappeared and the sirens can work properly again.
Panel Line Fault	The phone line connected to the control panel is not working properly.	Ensure that the phone line is connected properly. Use a test phone to check proper service.
Panel Mains Fault	The mains power supply to the control panel is missing.	Reconnect the power supply and ensure it is working properly.
Panel Siren Fault	The connection to the control panel's siren is broken.	Repair the open circuit.
Remote Fail to Communicate	A reporting module tried to send a message to the central station but failed.	Ensure that the phone line is connected properly. Use a test phone to check that the phone service is available. Ensure that the central station phone number, account and protocol options are correct. Check that the module is connected and working.
Remote Box Tamper	There has been interference with the casing of an expansion module.	Ensure that the casing is not damaged and is mounted correctly on a flat surface. If there is no damage, close the casing securely.
Remote Low Battery	The standby battery in an expansion module is low.	The battery may need replacing. This may be a temporary condition caused by a long power failure.
Remote Over-Current	The expansion module has detected an excessive amount of current being drawn from one of its outputs and has disabled the output as a means of protection.	Check the module for wiring faults.
Remote Mains Fault	The mains power supply is not connected to an expansion module power supply.	Reconnect the mains power supply and ensure it is working properly.
Remote Siren Fault	The connection to an expansion module's siren is broken.	Repair the open circuit.
Remote Trouble	An expansion module or keypad is not reporting to the control panel.	Ensure that the module is connected properly to the control panel.
Tamper Zone X	There is a problem with the wiring or the sensor is damaged.	Check the zone and zone sensors for damage and repair any faults.
Zone Problem Press OK	There is a problem with a zone or zones. Press OK to identify the zone(s) and the problem condition. One of the following messages is displayed when you press OK.	

Message	Definition		Action
	CleanMe	A specific smoke detector (for example, DP721) is dirty. The panel detects a degree of pollution in the chamber of the fire/smoke detectors.	Clean the detection chamber of the smoke detector. **Note:** This message is not shown on the LCD display, only listed in the event log.
	Open	There is a problem with the wiring.	Check the zone and zone sensors for damage and repair any faults. **Note:** This message is displayed in case of wired zones only.
	Lost	The system has not received RF sensor transmissions for a long period of time. Depending on how the system is programmed, this condition activates a service report. In addition, it may activate a tamper alarm if armed.	Ensure that the wireless zone module is receiving power and has not been tampered with. Repair any faults.
	Low Battery	An RF sensor battery is low.	Replace the battery.
	Short Loss	The system has not received RF sensor transmissions for a short period of time. This condition prevents arming.	Ensure that the wireless zone module is receiving power and has not been tampered with. Repair any faults.

Appendix 5: Tasks summary

Users with different rights are allowed to perform different tasks in the system. Table 49 *System tasks* lists each task. Black fields indicate tasks that cannot be performed at the particular level, while white fields indicate allowed actions. Checkmarks denote tasks that can be performed conditionally, and conditions required are explained in the *Condition* column.

Table 49. System tasks

Task	Installer	Master user	User	No code	Condition
Adjusting the LCD contrast					
Answer an up/download call				✓*	* If the 2.4.2.7 *Require Code for Download* menu option is set to *No*.
Arm and disarm the system	✓*		✓*	✓**	* If authority allows (see settings in the *Authority* menu group). ** If the keypad is in a single-partition mode, and the 2.5.2.1.1 *Quick Arm* menu option is set to Yes, you can arm without entering the user code, just by pressing the F3, F4 or F7 function key.
Bypass a zone		✓*	✓*	✓*	* If authority allows (see settings in the *Authority* menu group).
Configure home automation devices					
Control home automation devices					
Engineer tamper reset		✓*			* If enabled for master users., i.e. if the 2.6.2.4.2 *User Code Resets Tamper Memory* menu option is set to *Yes*.
Initiate an up/download call				✓*	* If enabled for use without a code, i.e. if the 2.4.2.7 *Require Code for Download* menu option is set to *No*.
Perform a configured test					
Perform a service check					
Perform a walktest					
Program voice phone numbers		✓*	✓*		* If the 3.1.6 *User Phone Editing* menu option is set to Enabled.
Reset fire detector					
Set system date and time					
Set user authority level					
Set user codes	✓*				* Only own code, Duress Code and GuardCodes 16 17.
Switch between master mode and single-partition mode					
View the alarm memory					
View the event log					

Appendix 6: Word library

Table 50. Word library

Alarm	Delay	Exterior	House	Microwave	Room	Smoke	Up
Area	Den	Fire	Infrared	Motion	Rumpus	Sound	Utility
Audio	Detector	Front	Instant	North	Safe	South	Vault
Back	Dining	Game	Interior	Nursery	Sensor	Stairs	Warehouse
Bathroom	Door	Garage	Junk	Office	Shock	Storage	West
Beam	Down	Glassbreak	Kitchen	Panic	Shop	Study	Window
Bedroom	Duress	Guest	Library	Pantry	Side	Tamper	Wing
Button	East	Hall	Light	Phone	Skylight	Television	Wireless
Ceiling	Emergency	Heat	Living	PIR	Sliding	Fault	Yard
Closet	Exit	Holdup	Master	Porch	Small	TV	Zone

Appendix 7: EN 50131 compliance

This chapter describes guidelines, actions, default values and settings required for the NetworX V3 alarm system to reach compliance with the EN 50131 standard. EN 50131 is the European norm that defines how intruder alarm systems should operate.

Setting the EN mode

When setting up a new EN 50131-compliant system you should perform the following actions:

1. Learn-in all (wired and wireless) keypads.
2. Enter the installer mode.
3. Execute *RF Receivers>Switch to EN*.
4. Execute *Control Panel>Reset Settings>Switch to EN*.
5. Execute *This Keypad>Switch to EN*.
6. Execute *Other Keypads>Switch to EN* for all other keypads.
7. Execute *NX-7002 Module>Switch to EN*.
8. Program remaining settings (like user codes, reporting, etc.).
9. Reset the control panel by switching the control panel's power supply off and on (including the battery).

When the existing system is being migrated to EN 50131-compliant settings, perform only steps **2** to **8**. Please note, that when the system is switched to EN many options take EN-specific default values that may differ from the previously set ones. For the list of default EN values, see Table 51 below.

Note: Setting the EN mode in the system without the telephone line connected or without the GSM modem configured will cause the Fail to Communicate error. It is recommended to connect and configure both means of communication when switching to the EN mode. If the telephone line is not going to be connected, the Phone Line Cut Delay must be set to 0 after setting the EN mode (*Control Panel>System Settings>Timers>Communications>Phone Line Cut Delay*). If GPRS is not going to be configured, Receiver Polling must be set to Disabled (*NX-7002 Module>Reporting>TCP/IP Reporting>Receiver Polling*).

Please note, that the *Switch to EN* command causes configuration copying that takes about 15 additional seconds to finish after the menu is exited. It is strongly recommended to wait for all actions to end before entering anything on the keypads in the updating system.

Note: Changing default EN options will make the panel not compliant with EN 50131 regulations, and any already available Compliance labeling should be removed. In order to stay fully compliant with EN regulations these options must stay set according to the Table 51, only in this case it is allowed to add the compliance labeling.

Note: The installer needs to learn-in I/O modules and sirens first and then to switch the Radio Module to the EN 50131 mode, otherwise default values for I/O modules and sirens will not be set automatically.

Table 51. Default EN 50131 settings

Option	Setting	Where	Menu path
Clock	Off	CP	Control Panel>System Settings>Feature Select>Clock>Use Cristal for Clock
Arm with Low Battery	No	CP	Control Panel>Partition Settings>Partition n>Feature Select>Arming>Arm with Low Battery
Arm with Tamper Mem/FTC	No	CP	Control Panel>Partition Settings>Partition n>Feature Select>Arming>Arm with Tamper Mem/FTC
Box Tamper	Yes	CP	Control Panel>System Settings>Feature Select>Inputs>Box Tamper
Bypass - code required	Yes	CP	Control Panel>Partition Settings>Partition n>Feature Select>Bypass>Code Required
EN Display Restrict	Yes	CP	Control Panel>System Settings>Feature Select>Miscellaneous>EN Display Restrict
EN Mode	Yes	CP	Control Panel>System Settings>Feature Select>Miscellaneous>EN Mode
Entry Time	30 s	CP	Control Panel>Partition Settings>Partition n>Timers>Entry Time 1/2
Exit Time	30 s	CP	Control Panel>Partition Settings>Partition n>Timers>Exit Time 1/ Exit Time 2
Forced Arming	No	CP	Control Panel>Inputs>Zone Types>Zone Type n>Attributes>Force Armable (for all zone types)
Immediate Zone Restore	Yes	CP	Control Panel>System Settings>Feature Select>Inputs>Immediate Zone Restore
Log Protection	No	CP	Control Panel>System Settings>Feature Select>Miscellaneous>Log Protection
Quick Arm	No	CP	Control Panel>Partition Settings>Partition n>Feature Select>Arming>Quick Arm
Tamper if Zone Lost	No	CP	Control Panel>Partition Settings>Partition n>Feature Select>Miscellaneous>Tamper if Zone Lost
User Code Resets Tamper Memory	Yes	CP	Control Panel>System Settings>Feature Select>Miscellaneous>User Code Resets Tamper Memory
Swinger Shutdown	0	CP	Control Panel>Inputs>Swinger Shutdown
Phone line cut fault delay	10 seconds	CP	Control Panel>System Settings>Timers> Communications>Phone Line Cut Delay
Autotest - in days	Days	CP	Control Panel>Communications>Autotest>Hours/Days?
Autotest interval	1	CP	Control Panel>Communications>Autotest>Interval
Keypress Tamper	Yes	CP	Control Panel>Partition Settings>>Partition n>Feature Select>Keypads>Keypress Tamper
Open/Close event reporting	Yes	CP	Control Panel>Communications>Central Station>Phone Numbers>Phone Number n>Events>Arm/Disarm/Alarm>Opening/Closing
Exit Error reporting	Yes	CP	Control Panel>Communications>Reporting>Partition Report>Exit Error
Siren sounds for expander trouble	No	CP	Control Panel>Outputs>Internal Siren>Sound On>Expander Trouble
Failure To Communicate report enabled	Yes	CP	Control Panel>Communications>Reporting>System Reports>Communications>Fail to Communicate

RF Low Battery	Yes	CP	Control Panel>Communications>Reporting>System Reports>Tamper/Fault>RF Low Battery
RF Sensor Lost	Yes	CP	Control Panel>Communications>Reporting>System Reports>Tamper/Fault>RF Sensor Lost
Failure To Communicate report enabled	Yes	CP	Control Panel> Communications>Central Station>Phone Numbers>Phone Number n>Events>Communications>Fail to Communicate
Autotest report enabled	Yes	CP	Control Panel>Communications>Reporting>System Reports>Communications>Autotest
Summer/wintertime automatic switch	Enabled	CP	Control Panel>System Settings>Feature Select>Clock>Summer/Winter Time
Installer code can arm/disarm	Yes	CP	Control Panel> Codes>Installer Code>Authority>Arm/Disarm
Reports Open/Close for the installer code	Yes	CP	Control Panel> Codes>Installer Code>Authority> Reports Open/Close
LED Extinguish	No	CP	Control Panel>Partition Settings>Partition n>Feature Select>Keypads>LED Extinguish
AC power/low battery sounder alert	No	CP	Control Panel>Partition Settings>>Partition n>Feature Select>Miscellaneous>Mains/Batt Sounder Alert
Silent exit	No	CP	Control Panel>System Settings>Features Select>Miscellaneous>Silent Exit Always
FTC Report Attempts	6	GSM	NX-7002 Module>Reporting>Report Attempts>FTC Report Attempts
Line Fault Indication	Yes	GSM	NX-7002 Module>Reporting>Line Fault Indication
Line Fault Reporting	Yes	GSM	NX-7002 Module>Reporting>Line Fault Reporting
Report Timeout	60	GSM	NX-7002 Module>Reporting>Report Attempts>Report Timeout
Receiver Polling	Enabled	GSM	NX-7002 Module>Reporting> TCP/IP Reporting> Receiver Polling
Polling Time	1 minute	GSM	NX-7002 Module>Reporting> TCP/IP Reporting> Polling Time
Max Reports in 24 Hours	0	GSM	NX-7002 Module>Reporting> Report Attempts> Max Reports in 24h
HomeText Control	Disabled	GSM	NX-7002 Module>Options> HomeText >System Control>HomeText Control
Battery Change Allowed	No	KP	This Keypad>Keypad Features> Battery Change Allowed
Case Tamper	Yes	KP	This Keypad>Keypad Features>Case Tamper
F1 Functional Key	Alarm Memory	KP	This Keypad>Function Keys>F1 Function
Hide PINs	Yes	KP	This Keypad>Keypad Features>Advanced Options>Hide PINs
Beep on RF loss	No	KP	This Keypad>Keypad Features>Advanced Options>Beep on RF loss
KP Shutdown allows Disarm	Yes	KP	This Keypad>Keypad Features>Advanced Options>KP Shutdown allows Disarm (recommended)
KP Shutdown shows Clock	Yes	KP	This Keypad>Keypad Features>Advanced Options> KP Shutdown shows Clock
Latch Faults Until Viewed	No	KP	This Keypad>Keypad Features>Advanced Options>Latch Faults Until Viewed
Silent Keypad	No	KP	This Keypad>Keypad Features>Silent Keypad

Status LED	Yes	KP	This Keypad>Keypad Features>Advanced Options>Status LED
Status LED Always On	Yes	KP	This Keypad>Keypad Features>Advanced Options>Status LED Always On
Tamper when removed from wall	Yes	KP	This Keypad>Keypad Features>Pry Off Switch>Always Tamper
LED Extinguish	Yes	KP	This Keypad>Keypad Features>Advanced Options>LED Extinguish
Jam Detection	Yes	RM	RF Receivers>RF Receiver 32>Receiver Features>Jam Detection
Fire Supervision	No	RM	RF Receivers>RF Receiver 32>Inputs>Sensor n>Fire Supervision (for each sensor)
Normal Window	1 hour	RM	RF Receivers>RF Receiver 32>Receiver Features>Supervision>Normal Window
Short Window	20 minutes	RM	RF Receivers>RF Receiver 32>Receiver Features>Supervision>Short Window
Supervised	Yes	RM	RF Receivers>RF Receiver 32>Inputs>Sensor n>Supervised (for each sensor)
Wake On Entry Timer	Yes	RM	RF Receivers>RF Receiver 32>Receiver Features>Wake Up Options>RF Keypad n>Wake On Entry Timer (for each keypad)
Wake On Exit Timer	Yes	RM	RF Receivers>RF Receiver 32>Receiver Features>Wake Up Options>RF Keypad n>Wake On Exit Timer (for each keypad)
Wake On Pulsing Buzzer	Yes	RM	RF Receivers>RF Receiver 32>Receiver Features>Wake Up Options>RF Keypad n>Wake On Pulsing Buzzer (for each keypad)
Alarm signal timer for sirens	Maximum of 15 minutes; if more than 15 minutes then 3 minutes are set.	RM	RF Receivers>RF Receiver 32>Outputs> I/O x Output y >Time Unit>Minutes (for each siren) RF Receivers>RF Receiver 32>Outputs>I/O x Output y >Time (for each siren) All sirens must be learned-in before switching to the EN mode.

Users

Access levels

According to the EN 50131 standard, there are 4 access levels which determine who can operate the system.

- Access Level 1 - General public (limited to viewing status).
- Access Level 2 - Users and the Master user.
- Access Level 3 - Installer, but only with Access Level 2 permission.
- Access Level 4 - Manufacturer, but only with with Access Level 2 and Access Level 3 permission. Access Level 4 is optional.

Permission for the installer

The installer can access the sytem only with the user's permission (even if the installer has the authority to arm/disarm the partition). Before the installer is able to enter the installer code, the user must cancel the active screen saver by entering the user code.

Changing user codes and/or rights

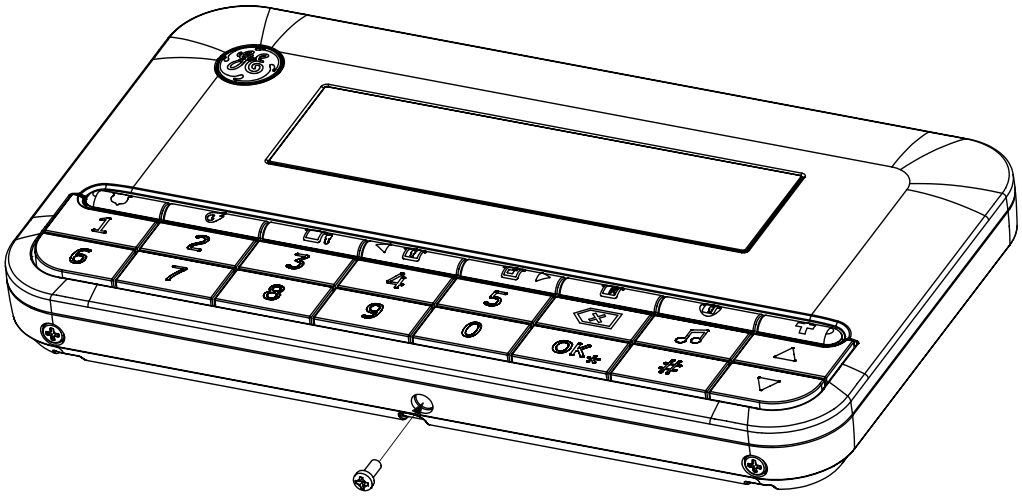
The installer is not allowed to change any user information. The appropriate menu is available for the Master User (adding new users, deleting users, changing user names and authorities) or the regular user (changing the user's own code and name).

Note: The Master User is not allowed to edit/change other users codes. The only person allowed to change the user code is the user the particular code belongs to.

Any changes to the user code or user authorities are logged. Two events - *User Code Changed* and *User Option Changed* - are logged in each case respectively.

Keypad

The keypad in a EN 50131-compliant system must have an additional screw keeping the cover in place.



Screen saver

In the EN 50131 Mode, the screen saver functionality is always active. The screen saver turns on after 30 seconds of the user's inactivity. You can also turn it on manually by pressing both arrow keys on the keypad simultaneously. To cancel the screen saver you have to enter the user code.

Note: The screen saver also turns on immediately after the Exit Delay expiration, even if it is shorter than 30 seconds.

Note: If Screensaver is active, also chime and function keys are disabled.

Keypad keypress tamper

EN 50131 requires detection of repeated invalid authorisation attempts done with logical keys. During code entering every entered digit is indicated by a number (1, 2, 3, etc.) in the right lower corner of a display. A valid code must be entered within 60 seconds from the first keypress, otherwise it is treated as invalid.

After 5 incorrect attempts the keypad gets disabled for 90 seconds. During the Keypad Keypress Tamper all pressed keys are ignored. This state is indicated on a display by information "Keypad Locked". If the Keypad Keypress Tamper occured then the Keypress Tamper event is logged with the partition number and the keypad ID.

The multipartition keypad also gets locked after 5 incorrect attempts. The multipartition keypad with the Partition Keypress Tamper received from the control panel allows to operate on not locked partitions. If not all partitions are locked, locked partitions are indicated on a multipartition keypad by exclamation marks "!". If the Keypad Keypress Tamper occured at the particular multipartition keypad or all keypad partitions are locked then "Keypad Locked" message is displayed and the whole keypad is disabled.

Incomplete Exit

If during arming, the Entry/Exit zone (for example, an exit door) is open at the end of the exit time then the system will not be armed and the special SIA code EE will be reported. Each Exit Error event is visible as a fault to acknowledge and it should be acknowledged.

Keypad volume turned down

If the keypad volume is set to 0 then in case of a reject beep (silenced) "Err" will be displayed for 1 second instead of digit icons. It allows the user/installer to notice that the setting was rejested by the system and the attempted change was unsuccessful.

Menu

Some menu options differ when the system is in the EN 50131 mode.

Set Date/Time

When in the EN 50131 mode the *Set Date/Time* menu option is displayed under *Installer Menu>Maintenance Mode*. When the EN mode is disabled, this menu option is available in the User menu.

EN Mode

This menu is visible in the EN mode only, and can be used for switching this mode off. It is available at *Control Panel>System Settings>Feature Select>Miscellaneous>EN Mode.*

Please note, that switching the EN 50131 Mode off does not change back any options set by switching this mode on previously. They must be set up manually as needed.

Manual Dialer Test

This menu option is added to the User Menu in the EN 50131 Mode. It allows the user to manually test the dialer when the Dialer Fault is signalled by the system.

Mandatory Event Log

This menu option is added to the User Menu in the EN 50131 Mode. It allows the user to review the mandatory log.

Holdup alarm

Switching to the EN 50131 Mode changes the "24h Silent" zone type into the "Holdup" zone type. Two new events: "Holdup" and "Holdup Restore" are also added to the system.

The holdup zone can be activated by a switch, a push button, or a panic button on a keyfob assigned to the holdup zone type. Activated holdup zones generate a holdup event. Holdup is a silent alarm with reported HA SIA code. Holdup state is also indicated with the Trouble icon (a triangle with an exclamation mark) on the keypad. Holdup restore event (HR SIA code) is sent only after the holdup alarm is acknowledged by the user with the Fault Acknowledging/Overriding functionality.

Note: It's recommended to change names of holdup zones to adequate names reflecting their functionality.

Fire alarm

The Fire alarm function is an additional function for the EN 50131 compliance.

Keyfobs

Using keyfobs in EN 50131-compliant systems is prohibited.

Scheduled arming/disarming

Scheduled arming/disarming in EN 50131-compliant systems is prohibited.

RF Receivers

Attenuated mode

According to the EN 50131, 6dB attenuation of RF link is required during installation to ensure that during normal system operation environmental changes wouldn't influence system stability. To enter the attenuated mode, select *RF Recevers>Receiver Features>Attenuated mode>Enable*. Attenuation command is executed only in the programming mode and can be disabled manually by the installer with the *Attenuated mode* menu option or is disabled automatically when switching from the programming mode to the user mode.

Event logs

In the EN 50131-compliant system two event logs are created - one containing all events, and the other containing events that are mandatory to log according to the norm (see Table 52).

In order to access the full log, select from the menu *User Menu>Log review*. To access the mandatory log, select from the menu *User Menu>Mandatory log review*.

Events in the mandatory log are limited to three the same events from the same source in one arm/disarm cycle. If the event from one source was stored in mandatory log 3 times during one cycle, next identical events are not stored in the mandatory event log.

The following table contains list of all events available in the NetworX V3 system, with numbers and their original names. Events marked with X are mandatory. All other events are non-mandatory.

Table 52. Mandatory and non-mandatory events

Event number	Event name	Mandatory
0	ALARM	X
1	ALARM RESTORE	X
2	BYPASS	X
3	BYPASS RESTORE	X
4	TAMPER	X
5	TAMPER RESTORE	X
6	TROUBLE	
7	TROUBLE RESTORE	
8	TX LOW BATTERY	X
9	TX LOW BATTERY RESTORE	X
10	ZONE LOST	X
11	ZONE LOST RESTORE	X
12	START OF CROSS TIME	
13	RESERVED	
14	RESERVED	
15	ZONE INACTIVE	
16	ZONE INACTIVE RESTORE	
17	SPECIAL EXPANSION EVENT- ELC_EXPANSION_EVENT_TYPE	
18	DURESS	X
19	MANUAL FIRE	
20	AUXILLARY 2 PANIC	
21	B-ALARM	X
22	PANIC	X
23	KEYPRESS TAMPER	X
24	CONTROL BOX TAMPER	X
25	CONTROL BOX TAMPER EVENT	X
26	AC FAIL	
27	AC FAIL RESTORE	
28	LOW BATTERY	X

29	LOW BATTERY RESTORE	X
30	OVER-CURRENT	
31	OVER-CURRENT RESTORE	
32	SIREN TAMPER	X
33	SIREN TAMPER RESTORE	X
34	TELEPHONE FAULT	X
35	TELEPHONE FAULT RESTORE	X
36	EXPANDER TROUBLE	X
37	EXPANDER TROUBLE RESTORE	X
38	FAIL TO COMMUNICATE	X
39	LOG FULL	
40	USER OPENING	X
41	USER CLOSING	X
42	USER EXIT ERROR	X
43	USER RECENT CLOSING	
44	AUTOTEST	
45	START PROGRAM	X
46	END PROGRAM	X
47	START DOWNLOAD	
48	END DOWNLOAD	
49	CANCEL	
50	GROUND FAULT	
51	GROUND FAULT RESTORE	
52	MANUAL TEST	
53	CLOSED WITH ZONES BYPASSED	X
54	START OF LISTEN IN	
55	TECHNICIAN ON SITE	
56	TECHNICIAN LEFT	
57	CONTROL POWER UP	
58	EARLY TO OPEN	
59	LATE TO CLOSE	
60	RF JAM	X
61	RF JAM RESTORE	X
62	ZONE CLEAN-ME	
63	ZONE CLEAN-ME RESTORE	
64	RESERVED	
65	RESERVED	
66	VERIFIED FIRE	
67	VERIFIED FIRE RESTORE	
68	USER OPENING AFTER ALARM	
69	FORCED DOOR	
70	FORCED DOOR RESTORE	
71	OFF-NORMAL AUTOTEST	

72	RAM CHECK FAILURE	X
73	ROM CHECK FAILURE	X
74	SYSTEM INACTIVITY	
75	AUX COMM FAIL	
76	AUX COMM FAIL RESTORE	
77	RESERVED	
78	RESERVED	
79	BUS PROBLEM (SMS MQC494)	X
80	BUS PROBLEM RESTORE (SMS MQC494)	X
81	USER CODE CHANGED	X
82	USER CODE AUTHORITY CHANGED	X
83	RF JAM	X
84	RF JAM RESTORE	X
85	USER CODE ADDED	X
86	USER CODE DELETED	X
87	HOLD-UP	X
88	HOLD-UP RESTORE	X
89	OVERRIDE	X
90	RESERVED	
91	RESERVED	
92	RESERVED	
93	RESERVED	
94	RESERVED	
95	RESERVED	
96	RESERVED	
97	RESERVED	
98	RESERVED	
99	RESERVED	
100	RESERVED	
101	RESERVED	
103	RESERVED	
103	RESERVED	
104	RESERVED	
105	RESERVED	
106	RESERVED	
107	RESERVED	
108	RESERVED	
109	RESERVED	
110	RESERVED	
111	RESERVED	
112	RESERVED	
113	PULSE COUNT	
114	10 UNSUCCESSFUL U/D ATTEMPTS	

115	SHUTDOWN RESTORE	
116	SHUTDOWN	
117	DEVICE ENROLLED	
118	OUTPUT RESTORE	
119	CLOCK SET	
120	FIRST TO OPEN	
121	LAST TO CLOSE	
122	PIN USED WITH BIT 7 SET	
123	BEGIN WALK-TEST MODE	
124	END WALK-TEST MODE	
125	RE-EXIT	
126	OUTPUT TRIP	
127	DATA LOST	X

Prevention of setting and fault acknowledging

Faults indicate problems in the system. Some of them can be solved by the user (like closing an open zone) but others may require calling the installer. In the EN 50131 Mode, every fault in the system must be acknowledged or overriden by the user. Active critical faults prevent arming of the system.

You can tell you need to acknowledge faults when “Zones Not Ready” or “Service Required” is displayed on the keypad. Fault Acknowledging/Overriding mechanism can be activated by pressing the “#” key or is activated automatically after disarming an alarmed partition.

Faults are displayed according to their importance, starting with the most important fault. Tampers are displayed first, then Alarm Memory, Zone Open, Zone Trouble, Zone Lost, and others. For the exact fault order, see Table 53 *Fault descriptions* below. There is a possibility to scroll up/down the fault list by using up/down arrow keys. If scrolling is possible arrows are displayed on the right side of the screen. If there is only one fault and overriding is not possible, no arrows are displayed.

When any fault is still active, arming of the system is impossible, and the fault must be fixed first (or overriden if possible) to allow the user to arm the system.

An active fault is displayed as:

```
Fault Name
Active
```

A non-active but unconfirmed fault is displayed as:

```
Fault Name
OK-Confirm
```

and can be confirmed by pressing “OK”.

When the system is armed, overriding is not allowed and the following message is displayed instead:

```
Fault Name
Inactive
```

Non-critical active faults can be overriden by the user without fixing them, if necessary. Non-critical faults are: Zone Open, Zone Trouble, Zone Lost, Zone Low Battery, Panel Mains Fault, RF Jammed, and others. Non-critical faults indicate problems that should be fixed but they do not prevent arming after overriding.

Critical faults cannot be overriden by the user. Critical faults are: Panel Box Tamper, Device Box Tamper, Siren Tamper, Zone Tamper and Zone Alarm Memory. Zone alarm memory can be simply acknowledged by the user but other physical problems must always get fixed first.

Overriding is allowed if:

- there are no active critical faults, and
- there are no unconfirmed critical faults, and
- there is at least one non-critical active fault, and
- the system is disarmed.

Overriding option is shown at the end of the fault list (only if it is allowed) as:

```
Override Faults
OK-Confirm
```

After pressing OK, opened zones will be bypassed and other faults will be ignored. The user will be able to arm the system.

Overriding can be cancelled. To do it, the user needs to activate Fault Acknowledging/Overriding mechanism again by pressing "#", scroll through faults to the override message, and then press "#".

```
Override Faults
#-Cancel
```

After pressing # bypassed zones will get to the normal state again and other faults will not be ignored (arming will be impossible).

In the rare case when the fault list changed while being previewed (the fault was added or removed), the following message is displayed at the end of the list:

```
Changed Fault List
OK-Recheck
```

Pressing OK allows to display the current fault list.

Faults that can be shown in the fault list are (in the order given):

Table 53. Fault descriptions

ID	Fault	Displayed text	Critical
1	Panel Box Tamper	`Panel Box Tamper`	**Yes**
2	Remote Box Tamper	`Box Tamper Device XXX`	**Yes**
3	Panel Siren Tamper	`Panel Siren Tamper`	**Yes**
4	--		
5	Zone Tamper P1	`Zone X Name Tamper`	**Yes**
6	Zone Tamper P2	`Zone X Name Tamper`	**Yes**
7	Zone Tamper P3	`Zone X Name Tamper`	**Yes**
8	Zone Tamper P4	`Zone X Name Tamper`	**Yes**

9	Zone Alarm P1	Zone X Name Alarm Memory	**Yes**
10	Zone Alarm P2	Zone X Name Alarm Memory	**Yes**
11	Zone Alarm P3	Zone X Name Alarm Memory	**Yes**
12	Zone Alarm P4	Zone X Name Alarm Memory	**Yes**
13	P1 Not Ready to Arm	Zone X Name Open	No
14	P2 Not Ready to Arm	Zone X Name Open	No
15	P3 Not Ready to Arm	Zone X Name Open	No
16	P4 Not Ready to Arm	Zone X Name Open	No
17	Zone Trouble P1	Zone X Name Trouble	No
18	Zone Trouble P2	Zone X Name Trouble	No
19	Zone Trouble P3	Zone X Name Trouble	No
20	Zone Trouble P4	Zone X Name Trouble	No
21	Zone Lost P1	Zone X Name Lost	No
22	Zone Lost P2	Zone X Name Lost	No
23	Zone Lost P3	Zone X Name Lost	No
24	Zone Lost P4	Zone X Name Lost	No
25	Zone Low Bat P1	Zone X Name RF Low Battery	No
26	Zone Low Bat P2	Zone X Name RF Low Battery	No
27	Zone Low Bat P3	Zone X Name RF Low Battery	No
28	Zone Low Bat P4	Zone X Name RF Low Battery	No
29	Panel Fail To Communicate	Panel Fail to Communicate	No
30	Loss of Time	Loss of Time	No
31	Panel Low Battery	Panel Low Battery	No
32	Panel Over-Current	Panel Over-current	No
33	Panel Line Fault	Panel Line Fault	No
34	Panel Mains Fault	Panel Mains Fault	No
35	--		
36	Panel Bus Fault	System Bus Error	No
37	RF Jamming	RF Jammed	No
38	RF FM Jamming	FM Jammed	No
39	Remote Trouble	Device XXX Trouble	No
40	Remote FTC	Device XXX Fail to Communicate	No
41	Remote Siren Fault	Device XXX Siren Fault	No
42	Remote Mains Fault	Device XXX Mains Fault	No
43	Remote Over Current	Device XXX Over-current	No
44	Remote Low Battery	Device XXX Low Battery	No
45	Keypress Tamper P1	Keypress Tamper Partition 1 Name	No
46	Keypress Tamper P2	Keypress Tamper Partition 2 Name	No
47	Keypress Tamper P3	Keypress Tamper Partition 3 Name	No
48	Keypress Tamper P4	Keypress Tamper Partition 4 Name	No
49	Incomplete Exit P1	Exit Error Partition 1 Name	No
50	Incomplete Exit P2	Exit Error Partition 2 Name	No
51	Incomplete Exit P3	Exit Error Partition 3 Name	No
52	Incomplete Exit P4	Exit Error Partition 4 Name	No
53	GSM Service Inaccessible	GSM Service Inaccessible	No

54	Panel not ready after enroll	Panel Not Ready to Arm	Other

where:

- "XXX" in "Device XXX" means the NetworX device address,
- "X" in "Zone X" means the zone number.

Note: Tamper from the zone, tamper from the expander and tamper from the siren on the board is logged each time a new tamper occurs. Tamper Restore and Alarm Restore is reported when the user acknowledges it. In the multi partition system it is sufficient to acknowledge alarm or tamper from one of available partitions.

Note: When the keypad used is a Master keypad, the faults are additionally filtered based on partitions assigned to the user logged to the current keypad. If the user's rights are limited to particular partitions, only information about these partitions is displayed.

Reporting

In the EN 50131 Mode, the report delivery must be confirmed. As a result, not all available transmission media may be used as the primary destination. SMS and HomeText report delivery cannot be confirmed, so they can be used as backup reports only, preferably as additional report controls (Report Control 2, etc.)

The primary destination in the EN 50131-compliant system can be PSTN, GPRS or TCP/IP. To minimize the report transmission time from the panel to the monitoring station, it is recommended to limit destinations for a single report control to the primary destination only. For example, for the Report Control 1 the Destination should be set as GPRS TCP/IP 1, and Backup Destination as Disabled. When the primary channel is GPRS TCP/IP, backup shouldn't be set as Other Dialer through NX10GSM as it can slow down the transmission.

The transmission path (PSTN and GPRS) can be tested after installation by using the function "Manual Dialer Test" in the user menu.

To make it working you need to enable it in the Installer menu Control Panel > System Settings > Feature Select > Diagnostics > Manual Dialer Test.

A guide to the identfication of simple/common faults can be found in Chapter B6 "Setting up the GSM/GPRS module (NX-7002)".

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